



## **Service Manual (100-115VAC)**



**K2 Water Cooler**

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## Product Specification

### K2

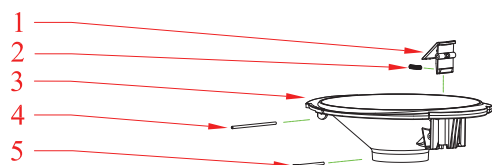
The K2 is the latest in Crystal Mountain's pursuit of modern appliance design. It features the revolutionary CrystalFlo™ Water Cartridge which is a removable reservoir system. The CrystalFlo™ can be easily removed and replaced as part of regular sanitization. All water contact components are simply replaced rather than being cleaned, which ensures 100% sanitization. The K2 has been designed with an ergonomic high dispense point, almost 12 inches (30cm) higher than traditional top load bottled water coolers. The recessed water outlet, the increased dispensing rate and the large dispensing area add to an enhanced user experience. The design and look of the K2 will improve customer retention and new customer acquisitions and the CrystalFlo™ water cartridge will simplify the cooler refurbishment process and provide repeat retail sales.



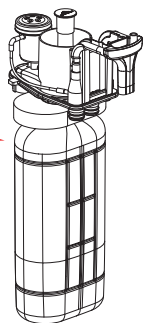
### Cooler Specifications

ITEM		SPECIFICATIONS
POWER RATING		SINGLE PHASE
		100-115VAC 60Hz
STANDARD CURRENT		Hot & Cold: 4.3~4.8 A
POWER	COLD	75 W
CONSUMPTION	HOT	450 W
COLD	COMPRESSOR	SINGLE PHASE MOTOR
	REFRIGERANT	R134a: 35g (1.2oz)
	TEMP RANGE	4-10°C ( 39.2-50°F )
HOT	HEATER	BAND HEATER
	TEMP RANGE	74-92°C ( 165.2-197.6°F )
	SAFETY DEVICE	BIMETAL (MANUAL LIMITER 98°C ( 203°F ) OFF)
	TEMP CONTROL	ELECTRONIC
NOISE (SOUND POWER LEVEL)		44 dB (A)
NET WEIGHT		Hot & Cold: 12.8 kg ( 28.2 lb )
LOADING QUANTITY		20FT: 320 UNITS
		40FT: 640 UNITS

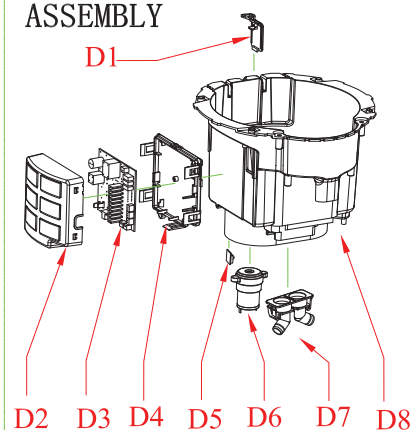
# Explode View - K2



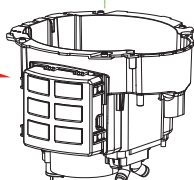
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## D. MAIN PCB AND INNER PANEL ASSEMBLY



D



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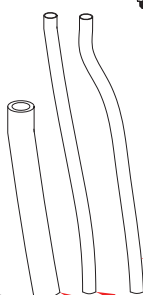
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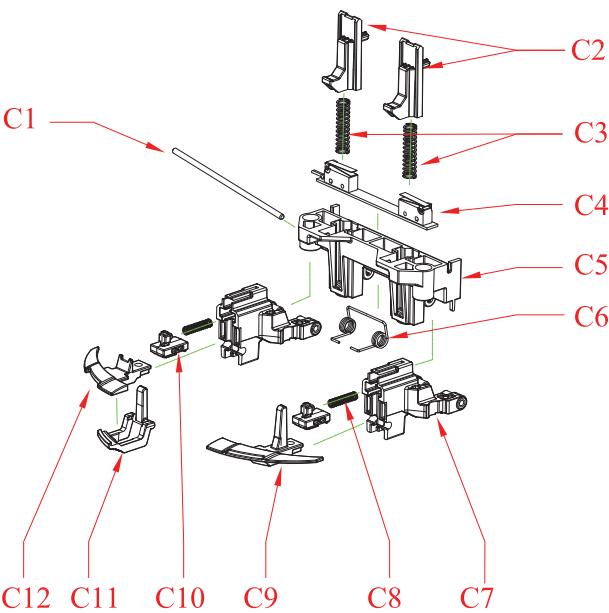
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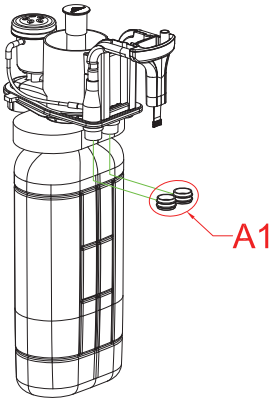
NO.	DESCRIPTION		PART CODE	Qty
1	Top Cover Clip		PLC-C141020	
2	FAUCET LOCK SPRING		FAS-C100007	
3	Top cover		PLC-C141019	
4	Hinge Pin.Top cover		FAS-C100091	
5	Hinge Pin.Top cover Clip		FAS-C100129	
6	Hot Switch		ELE-C100280	
7	Cold Sensor		ELE-C100282	
8	Light PCB, LT - K2		ELE-C100300	
9	Lens		PLC-C141018	
10	Drip Tray		PLC-C141037	
11	HT Inlet Tube, OD 15 x ID 12 x 585mm		SIL-C141009	
12	HT Outlet Tube, OD 15 x ID 12 x 380mm		SIL-C141008	
13	K2 Foam Tube, ID16mm x OD28mm x L310mm		REF-C100201	
14	SPRING CLIPS - 14mm		FAS-C100100	
15	EVAPORATION SHELF		PLC-C141005	
16	115V Power Cord, w/2 Pin Connector - K2		ELE-C100277	
17	Side Panel, Left		PLC-C140016	
18	Base Plate Assembly		SUB-C200340	
	18A	BASE PLATE, LEFT	PLC-C141001	
	18B	BASE PLATE, MIDDLE	PLC-C141003	
	18C	BASE PLATE, RIGHT	PLC-C141002	
19	FRONT PANEL		PLC-C141017	
20	SS Cup Dispenser Spring		MIS-C100090	
21	Piston, Cup Disp (Black)		PLC-C140047	
22	Cup Disp Gasket - ID 70MM (Black)		PLC-C140048	
	Cup Disp Gasket - ID 60MM (Black)		PLC-C140049	
23	LOWER FRONT PANEL		PLC-C141015	
24	Side Panel, Right		PLC-C140015	
25	EV/K2 Drain Cover		SUB-C200743 SUB-C200744	SUB-C200743 20 Set Bulk Pack- EV/K2 Drain Cover SUB-C200744 100 Set Bulk Pack- EV/K2 Drain Cover

# Explode View – K2

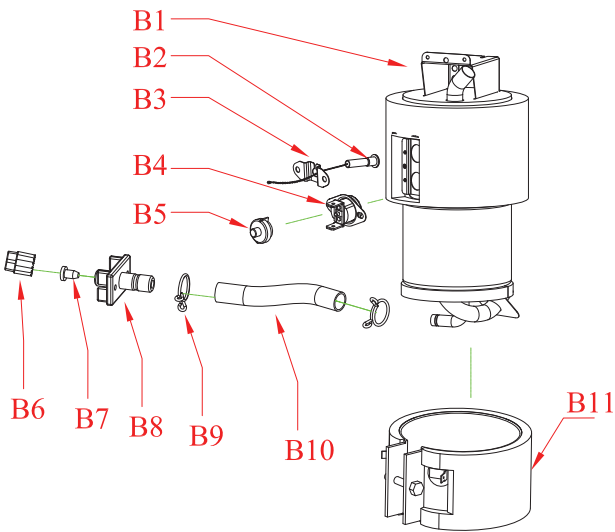
## C. TAP ASSEMBLY



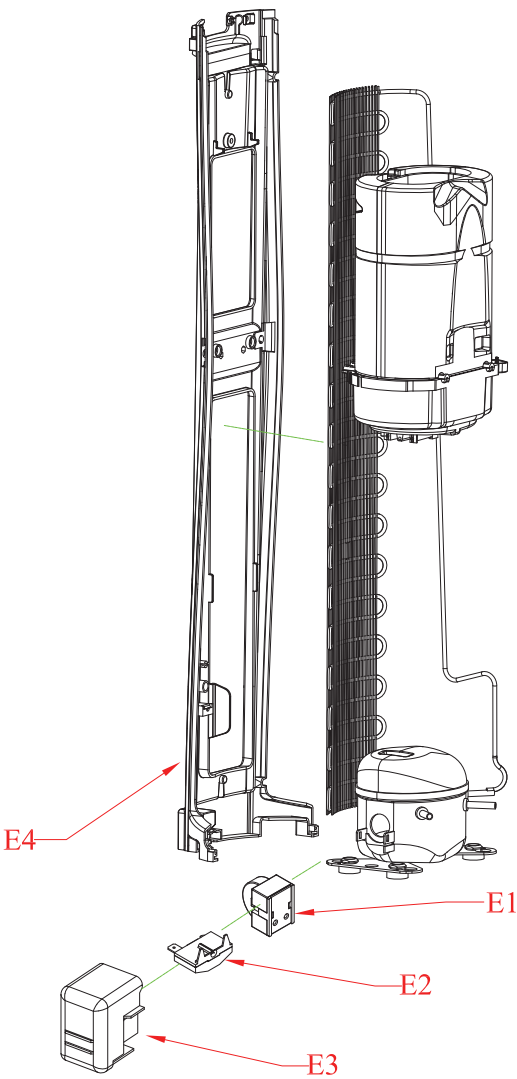
## A. CrystalFlo System



## B. Hot Tank Assembly

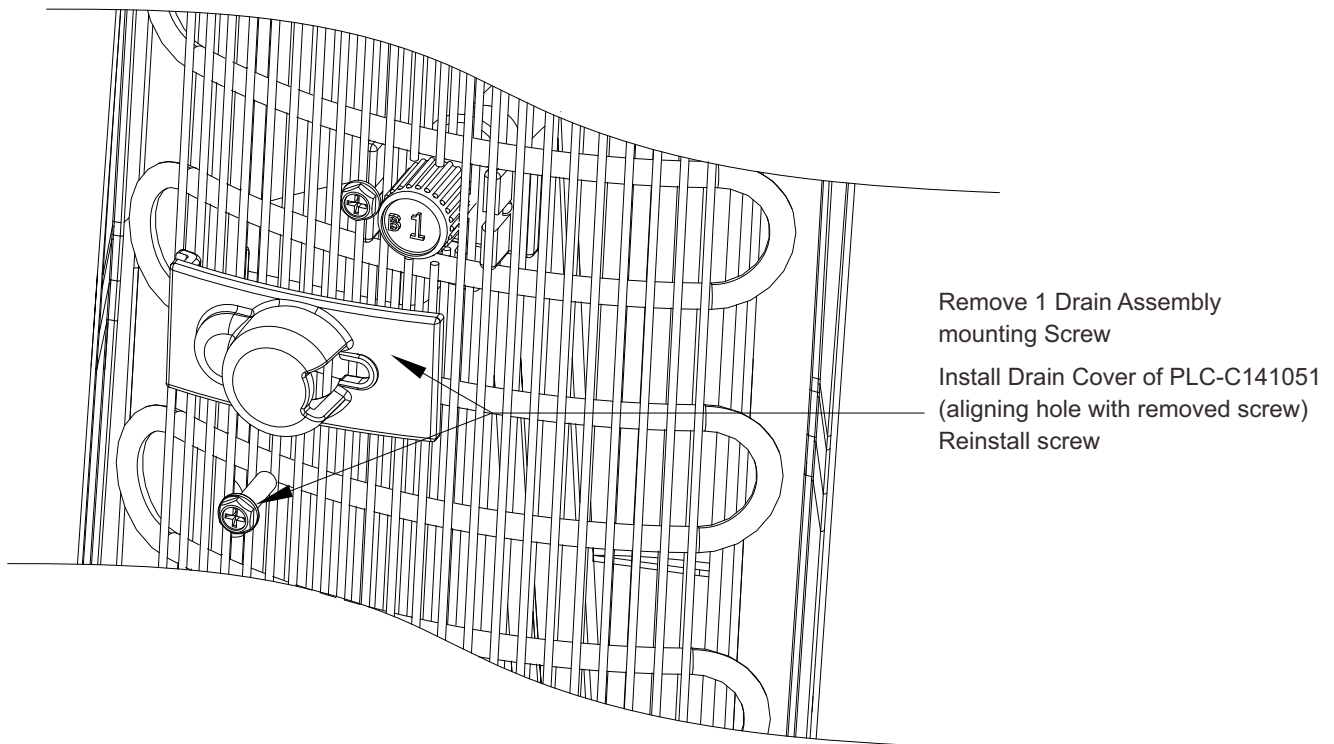


## E. Refrigeration System



NO.	DESCRIPTION		PART CODE	Qty
A	12PCS Top Load CrystalFlo		SUB-C200864(NA)	
			SUB-C200836(Primo)	
	21PCS Bulk Box CrystalFlo		SUB-C200862(NA)	
			SUB-C200835(Primo)	
	A1	Seal, Manifold Inlet/Outlet - OD18 x 11mm	SIL-C120006	
E	Refrigeration System			
	E1	115V Compressor Relay (B25H5)	REF-C100168	
	E2	115V Compressor Overload Protector (B25H5)	REF-C100167	
	E3	Compressor Cover	REF-C100164	
	E4	Back panel	PLC-C140002	
B	220V Hot Tank Assembly		SUB-C200326	
	B1	K2 HOT TANK + INSULATION (SS304)	SUB-C200342	
	B2	Hot Sensor	ELE-C100283	
	B3	Support Bracket, Hot Sensor	FAS-C100130	
	B4	98C CERAMIC MANUAL RESET	ELE-C100170	
	B5	Manual reset cover, Grey	SIL-C140006	
	B6	Drain Cap, Hex Head	PLC-C100399	both parts into a Kit: SUB-C000224
	B7	Hot drain plug - Yellow	SIL-C100154	
	B8	Hot Tank Drain	PLC-C120021	
	B9	Spring Clip - 12mm	FAS-C000029	
	B10	Silicone Drain Tube	SIL-C140004	
	B11	Ex Heater + Ins, 115V, 450W - K2	ELE-C100298	
C	TAP Assembly			
	C1	SS Pin, OD 3mm, length 95mm	FAS-C100128	
	C2	PINCH	PLC-C141011	
	C3	SS Spring, faucet, OD 7.2, length 40, wire diameter 0.8	FAS-C100125	
	C4	Micro-Switch PCB	ELE-C100285	
	C5	Tap Retainer	PLC-C141010	
	C6	Double torsion spring	FAS-C100127	
	C7	Faucet Pivot	PLC-C141013	
	C8	SS Spring,Catch.OD4.5.length 18.5 wire diameter 0.5	FAS-C100126	
	C9	Cold Lever (Std)	PLC-C141038	
	C10	CATCH	PLC-C141012	
	C11	Child Resistant Lever, Red	PLC-C141014	
	C12	Hot Lever (Child Res)	PLC-C141039	
D	Main PCB and Inner Panel Assembly			
	D1	PCB Access Cover	PLC-C141034	
	D2	PCB COVER	PLC-C141008	
	D3	Main PCB, LT - K2	ELE-C100299	
	D4	PCB Box	PLC-C141007	
	D5	Timer Switch PCB	ELE-C100286	
	D6	Pump Motor	ELE-C100276	
	D7	Hot Water Adaptor	PLC-C141009	
	D8	Inner Chassis	PLC-C141006	

## DRAIN COVER INSTALLATION



Note: Screw Installation Torque 4.5kgf.cm (3.9 in.lb)

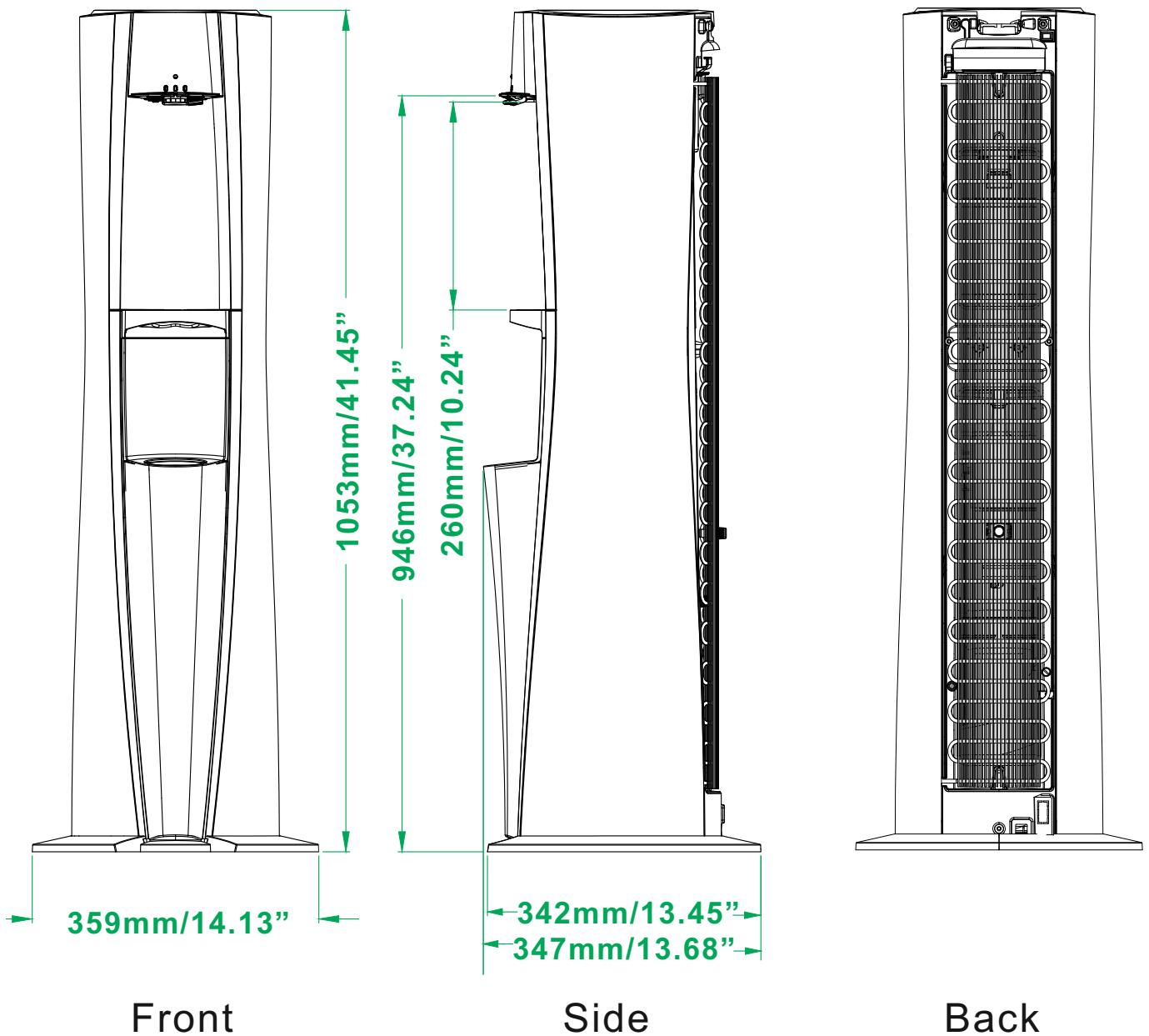
SUB-C200743 - 20 Set Bulk Pack - EV/K2 Drain Cover

SUB-C200744 - 100 Set Bulk Pack - EV/K2 Drain Cover



# Product Dimensions

## K2 (bottled water cooler)





## Description of Product Model Number

**K2**

Cooler Shape

K2- K2

**F**

Reservoir Type

F – CrystalFlo Water Cartridge

**M**

Type of Lid

M- Manifold

**2**

No. of Faucets

**K**

Body Color

K – Black

**H**

Temp. Option

H – Hot & Cold

**K**

Insert Color

K – Black

**1**

Voltage

1 – 110~115V

**C**

Optional

C – with Cup Dispenser

You can find your serial and model number at the back of your cooler.



## Replacement of CrystalFlo™ Water Cartridge

A flashing yellow light above the faucet levers will alert you to when the CrystalFlo™ Water Cartridge should be replaced. The system has been pre-set to provide indication after a period of 12 months of use. User may operate the cooler as normal until the bottle has been emptied. It is also advised to replace the CrystalFlo™ cartridge if there is a leak from the cartridge, taste problem or discoloration to the water.

**Note:** To reset the life timer system, the CrystalFlo™ is required to be removed from the dispenser for a minimum of 15 seconds while the unit is connected to the mains power supply.

1. Place a glass or other container below the water outlets (to catch drips)(Figure 3-1), and unlatch the Top Cover Locking Clip (located inside of the Bottle Installation area)(Figure 3-2), and open Top Cover (Figure 3-3).



Figure 3-1



Figure 3-2



Figure 3-3

2. Pull CrystalFlo™ Water Cartridge upwards to remove (Figure 3-4). Do not squeeze the water reservoir as water could leak out. In addition, it may be helpful to have a bucket nearby to place the used CrystalFlo™ in.



Figure 3-4

3. Please recycle the CrystalFlo™ whenever possible, otherwise dispose of responsibly.
4. Ensure seal is properly installed on the Inlet/Outlet tube of the CrystalFlo™ Water Cartridge assembly (Figure 3-5) (may have shifted during shipment or un-packaging).



Figure 3-5

5. Align CrystalFlo™ Water Cartridge with openings in cooler, and push downwards into place (Figure 3-6). Ensure that foam seal is pushed down and seals the reservoir completely.



Figure 3-6

6. Close the top cover (push downwards to lock into place) (Figure 3-7 and Figure 3-8). If cover does not close completely, make sure that CrystalFlo™ is inserted completely.



Figure 3-7



Figure 3-8

7. Install replacement bottle (Figure 3-9).

**Note:** To prevent water leaks, a NON-SPILL Bottle Cap MUST be installed on the bottle.



Figure 3-9

8. Prime water system (See K2 Quick Start guide “Prime Water System” for instructions if needed).

## SECTION 4: Cabinet Panel Removal and Installation

Notice:

The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.

Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

### Install Base Plate

1. Stand cooler upright on flat, smooth surface floor.
2. Align side plate with base (Figure 4-1-1), and slide into base to locked position. (Figure 4-1-2 and Figure 4-1-3). The side plates are inserted so that the inner faces mount flush in the rear of the cooler. There will be an open triangular area in the front.



Figure 4-1-1



Figure 4-1-2



Figure 4-1-3

3. Repeat for opposite side. (Figure 4-1-4 and Figure 4-1-5)



Figure 4-1-4



Figure 4-1-5

## SECTION 4: Cabinet Panel Removal and Installation

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### Lower Front Panel Removal & Installation

1. Remove Drip Tray by pulling outwards from the body (Figure 4-2-1).



Figure 4-2-1

2. Using a Philips screwdriver, remove the screw from the lower front panel (located behind Drip tray assembly location) (Figure 4-2-2).

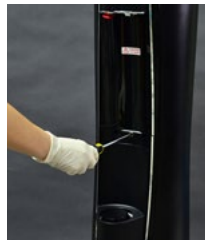


Figure 4-2-2

3. Pull outwards on the lower front panel to disengage locking tabs from the front of the cooler (Figure 4-2-3). The front panel and cup dispenser on this model are separate parts. Only the front panel will be removed.



Figure 4-2-3

4. Install in reverse order.

## SECTION 4: Cabinet Panel Removal and Installation

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### Side Panel Removal

1. Remove Lower front panel (Figure 4-3-1)(Refer to Lower Front Panel Removal & Installation).



Figure 4-3-1

2. Remove the 2 side panel installation screws from the front of the cooler (located mid way up the front panel) (Figure 4-3-2).



Figure 4-3-2

3. Remove the 2 side panel installation screws from the back of the cooler (located mid way up the back panel) (Figure 4-3-3).



Figure 4-3-3

4. Open the Top Cover by pressing the cover lock (Figure 4-3-4), and lifting the front of the Top Cover upwards (rotate upwards to rear of the cooler) (Figure 4-3-5).



Figure 4-3-4



Figure 4-3-5

5. Grip the top edge of the side panel and lift slightly (approximately  $\frac{1}{2}$  inch) and pull outwards from cooler to remove (Figure 4-3-6 to Figure 4-3-7).



Figure 4-3-6



Figure 4-3-7



## SECTION 4: Cabinet Panel Removal and Installation

### Notice:

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Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

### Side Panel Installation

1. Identify which panel belongs on which side of the cooler (Figure 4-4-1 to Figure 4-4-2). The Locking clip (located approximately 10 inches/250mm up from the base of the panel on the inside surface) is to be installed towards the front of the cooler.

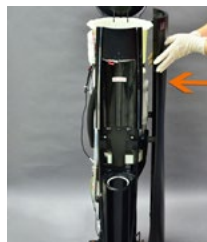


Figure 4-4-1



Figure 4-4-2

2. Gripping the top edge of the side panel, insert the screw support into the slot on the Front Panel (near Drip Tray area) (Figure 4-4-3 to Figure 4-4-4), and align the locking clip, bottom edge, upper clips, and slide downwards to lock into place (Figure 4-4-5 to Figure 4-4-8). Install the screw into the front/back screw supports to secure in place (Figure 4-4-9 to Figure 4-4-10).



Figure 4-4-3



Figure 4-4-4



Figure 4-4-5



Figure 4-4-6



Figure 4-4-7



Figure 4-4-8



Figure 4-4-9



Figure 4-4-10

## SECTION 4: Cabinet Panel Removal and Installation

### Notice:

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Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

### Main Front Panel Removal & Installation

Note: Begin with the unit unplugged, the reservoir removed and the lower front and side panels removed.

1. Remove the cup dispenser spring first (Figure 4-5-1 and Figure 4-5-2) and faucet handles (Figure 4-5-3, Figure 4-5-4, Figure 4-5-5 and Figure 4-5-6)



Figure 4-5-1



Figure 4-5-2



Figure 4-5-3



Figure 4-5-4



Figure 4-5-5



Figure 4-5-6

2. To remove the front panel, remove the two screws on top (Figure 4-5-7), the two screws in the middle (Figure 4-5-8), the two screws on the bottom (Figure 4-5-9) .



Figure 4-5-7

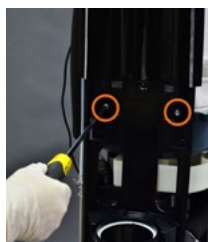


Figure 4-5-8



Figure 4-5-9

3. With all the screws removed, remove the protective cover from the PCB (Figure 4-5-10 ), and disconnect the light PCB terminal from the PCB (Figure 4-5-11). pull the front panel near the base plate forward to remove (Figure 4-5-12 and Figure 4-5-13).

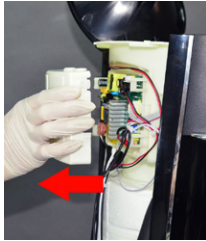


Figure 4-5-10



Figure 4-5-11



Figure 4-5-12



Figure 4-5-13

4. For reassembly align the bottom of the front panel with the appropriate guides in the base plate (Figure 4-5-14). Then follow the above steps in reverse order.

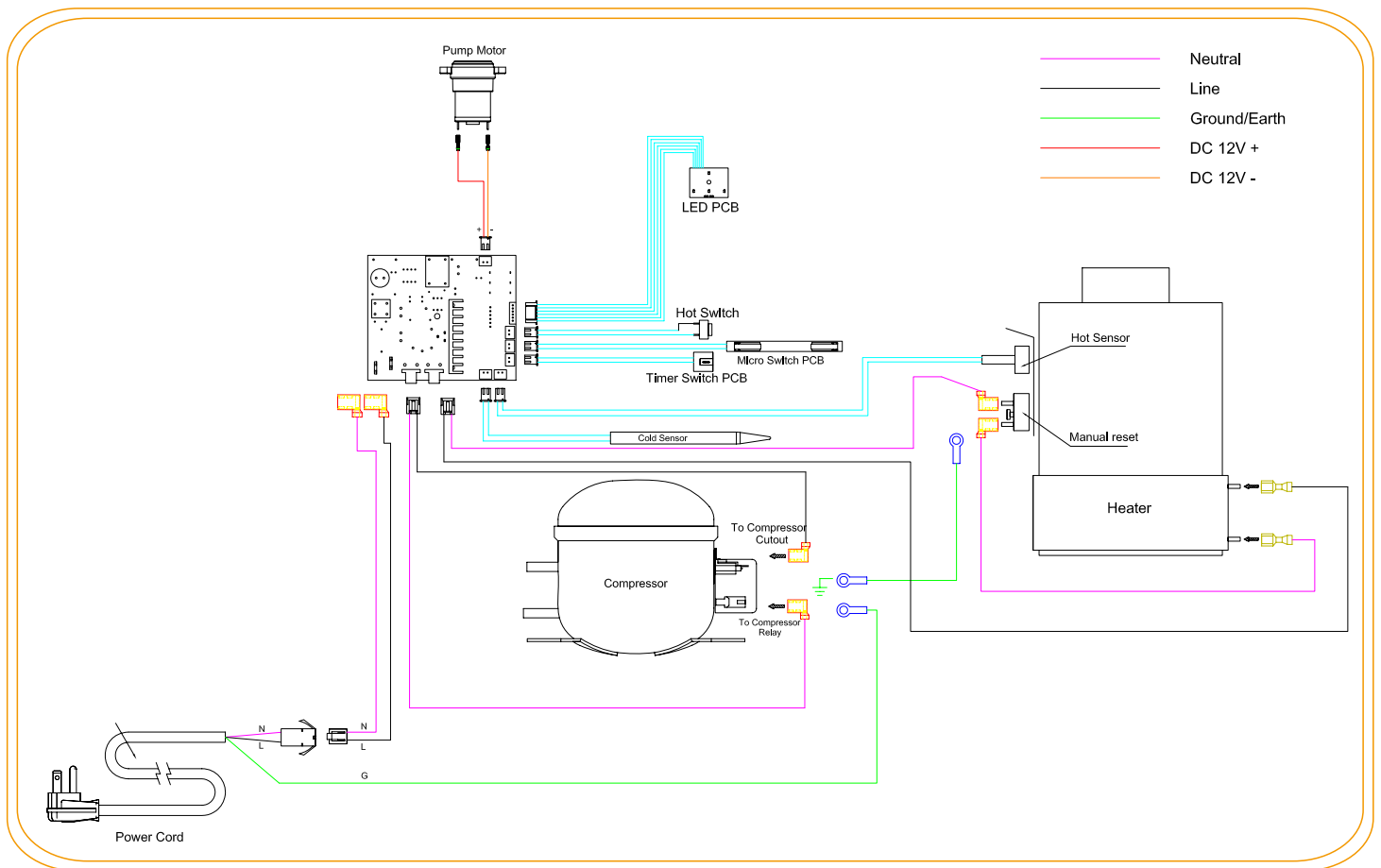


Figure 4-5-14

# SECTION 5: Electrical Component Diagnosis and Replacement

## Wiring Diagram

### Models: K2 Hot & Cold



## SECTION 5: Electrical Component Diagnosis and Replacement

Notice:

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Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

### Cold Sensor Removal and Installation

1. In the event that the Cold Sensor requires to be replaced, the Blue indicator light (above Cold Dispense Lever) will flash (Figure 5-2-1).



Figure 5-2-1

2. Turn off hot tank power switch (located at top/back of dispenser) (Figure 5-2-2) and unplug the water cooler (Figure 5-2-3).



Figure 5-2-2



Figure 5-2-3

3. Remove CrystalFlo™ Assembly from the water dispenser (Figure 5-2-4) (see section for CrystalFlo™ Removal Instructions).



Figure 5-2-4

4. Remove the Side Panels from the water dispenser (see section for Side Panel Removal Instructions).

5. Remove the protective cover from the PCB, and disconnect the cold sensor terminal from the PCB. (Figure 5-2-5 and Figure 5-2-6).



Figure 5-2-5



Figure 5-2-6

6. If required, cut the ties holding the wires together, taking care not to damage any of the wires (Figure 5-2-7).



Figure 5-2-7

7. Pull the sensor tube out from the Evaporator Insulation to remove (Figure 5-2-8).



Figure 5-2-8

8. Install the replacement Cold Sensor into the Evaporator Insulation (insertion length approximately 5 inches/125mm) (Figure 5-2-9 and Figure 5-2-10).

**Note:** Care should be taken while installing the cold sensor that the end within the evaporator insulation is in the proper position.



Figure 5-2-9



Figure 5-2-10

9. Connect the terminal for the cold sensor to the PCB (take care to ensure proper installation location) (Figure 5-2-11).



Figure 5-2-11

10 . Reinstall PCB Cover over PCB, taking care not to pinch any wires (Figure 5-2-12).



Figure 5-2-12

11. Install wire ties to hold wiring in position (Figure 5-2-13).



Figure 5-2-13

12. Reinstall Side panels and CrystalFlo™ (see side panel SECTION 4, see CrystalFlo™ SECTION 3).

## SECTION 5: Electrical Component

### Diagnosis and Replacement

**Notice:**

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Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

#### Water Temperature Adjustment

1. Remove Bottle and open the Top Cover (Figure 5-3-1 and Figure 5-3-2)



Figure 5-3-1



Figure 5-3-2

2. Remove screw from the PCB access cover (Figure 5-3-3) and remove the cover (Figure 5-3-4 and Figure 5-3-5)



Figure 5-3-3



Figure 5-3-4



Figure 5-3-5

3. Behind the access cover are 3 switches: (Factory Setting highlight in Blue)

Switch	Left Position	Middle Position	Right Position
Top (Cold Water)	Coldest 41°F / 5°C	46°F / 8°C	50°F / 10°C
Middle (Hot Water)	Hottest 187°F / 86°C	183°F / 84°C	179°F / 82°C
Bottom (CrystalFlo™ Timer)	12 Month Timer	6 Month Timer	OFF

Allow the cooler to stabilize for 2-3 hours to ensure the proper temperature of the cold water.



## SECTION 5: Electrical Component Diagnosis and Replacement

### Notice:

The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.

Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

### Hot Sensor Removal and Installation

1. In the event that the Hot Sensor requires to be replaced, the Red indicator light (above Hot Dispense Lever) will flash (Figure 5-4-1).



Figure 5-4-1

2. Turn off hot tank power switch (located at top/back of dispenser) (Figure 5-4-2) and unplug the water cooler (Figure 5-4-3).



Figure 5-4-2



Figure 5-4-3

3. Remove Left Side Panel from the water dispenser (Figure 5-4-4 ) (see side panel SECTION 4).



Figure 5-4-4

4. Remove the protective cover from the PCB (Figure 5-4-5), and disconnect the Hot Sensor terminal from the PCB. (Figure 5-4-6)



Figure 5-4-5

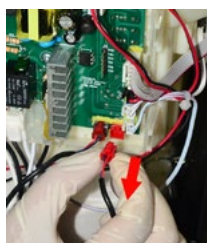


Figure 5-4-6

5. If required, cut the ties holding the wires together, taking care not to damage any of the wires (Figure 5-4-7).



Figure 5-4-7

6. Remove the 2 screws from the sensor bracket on the hot tank (Figure 5-4-8 and Figure 5-4-9).



Figure 5-4-8



Figure 5-4-9

7. There is enough heat transfer paste on the tank and old sensor to simply wipe the face of the new sensor against the old one (Figure 5-4-10). Place into position and evenly tighten the two screws (torque to 3.4-6.9 lbf.in) (Figure 5-4-11 and Figure 5-4-12).



Figure 5-4-10

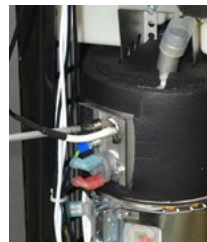


Figure 5-4-11



Figure 5-4-12

8. Connect the terminal for the hot sensor to the PCB (take care to ensure proper installation location) (Figure 5-4-13).

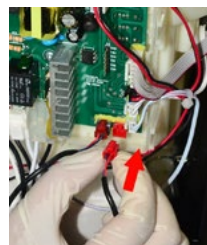


Figure 5-4-13

9. Reinstall PCB Cover over PCB (Figure 5-4-14), taking care not to pinch any wires .



Figure 5-4-14

10. Install wire ties to hold wiring in position (Figure 5-4-15).



Figure 5-4-15

11. Reinstall Side panels and CrystalFlo™ (Figure 5-4-16 )(see side panel SECTION 4).



Figure 5-4-16

## SECTION 5: Electrical Component

### Diagnosis and Replacement

**Notice:**

The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.

Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

#### Hot Tank Limiter Replacement

Note: Begin with the unit unplugged, the water drained and the left side panel removed (Figure 5-5-1, Figure 5-5-2 and Figure 5-5-3).



Figure 5-5-1



Figure 5-5-2



Figure 5-5-3

Tip: Use a small flathead screwdriver to pry wire connectors off .

1. Remove the wire connectors from the top and bottom of the Limiter (Figure 5-5-4 and figure 5-5-5). Remove the two screws and remove the Limiter from the bracket (Figure 5-5-6 to Figure 5-5-8).



Figure 5-5-4



Figure 5-5-5



Figure 5-5-6

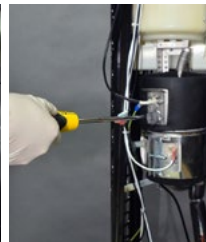


Figure 5-5-7



Figure 5-5-8

2. There is enough heat transfer paste on the tank and old Limiter to simply wipe the face of the new Limiter against the old one (figure 5-5-9). Place into position and evenly tighten the two screws (torque to 3.4-6.9 lbf.in) (figure 5-5-10 to figure 5-5-11).



Figure 5-5-9

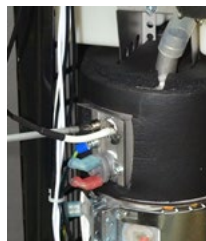


Figure 5-5-10



Figure 5-5-11

3. Reconnect the wires onto the Limiter (figure 5-5-12 to 5-5-14).

Note: Both parts can be changed in the same manner. If replacing the Limiter, ensure the reset button has been pushed in prior to left panel installation.



Figure 5-5-12



Figure 5-5-13



Figure 5-5-14

## SECTION 5: Electrical Component

### Diagnosis and Replacement

**Notice:**

The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.

Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

#### Hot Tank Removal and Replacement

Note: Begin with the unit unplugged, the water drained and the side panels removed (Figure 5-6-1, Figure 5-6-2 and Figure 5-6-3).



Figure 5-6-1



Figure 5-6-2



Figure 5-6-3

Tip: Use a small flathead screwdriver to pry wire connectors off.

1. Remove the two spring clips that secure the silicone hoses to the inlet and outlet pipes. Remove the hoses from the hot tank and identify (Figure 5-6-4 to 5-6-9).

Note: Hoses may be difficult to remove. If necessary, use a flathead screwdriver to slide up between the tube and pipe to release the hoses (Figure 5-6-5 and Figure 5-6-8). Be careful not to damage hoses.



Figure 5-6-4



Figure 5-6-5



Figure 5-6-6

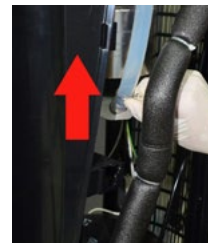


Figure 5-6-7



Figure 5-6-8



Figure 5-6-9



2. Remove the two screws on the hot tank drain assembly at the back of dispenser (Figure 5-6-10 and Figure 5-6-11).



Figure 5-6-10

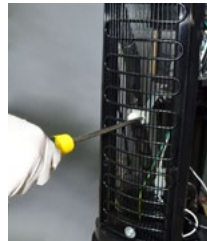


Figure 5-6-11

3. Remove and identify the 2 wires from the limiter and heater (Figure 5-6-12 to 5-6-14).



Figure 5-6-12



Figure 5-6-13



Figure 5-6-14

4. With a Philips screwdriver remove the ground wire from the thermostat bracket (Figure 5-6-15).



Figure 5-6-15

5. Remove the two screws and remove the Limiter from the bracket (Figure 5-6-16 to Figure 5-6-18).



Figure 5-6-16



Figure 5-6-17



Figure 5-6-18

6. Remove the two screws from the Hot Sensor Bracket (Figure 5-6-18 and Figure 5-6-20 ).



Figure 5-6-18



Figure 5-6-19



Figure 5-6-20

7. Disconnect the 2 wires from the Heater Band (Figure 5-6-21 to Figure 5-6-24)



Figure 5-6-21



Figure 5-6-22



Figure 5-6-23



Figure 5-6-24

8. Remove the single screw that secures the hot tank in place (Figure 5-6-25). Carefully slide the hot tank out from the bracket (Figure 5-6-26 and Figure 5-6-27).



Figure 5-6-25



Figure 5-6-26



Figure 5-6-27

9. See instructions for Hot Tank Heater Band Replacement

10. Reinstall the new hot tank, and following the steps in reverse order, install Hot Sensor Bracket, Limiter and Ground wire. Reconnect all wires as identified, if necessary refer to the wiring diagram (See Section 5 wiring diagram). Reconnect the two hoses as identified and spring clips.



## SECTION 5: Electrical Component Diagnosis and Replacement

Notice:

The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.

Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

### Hot Tank Heater Band Replacement

Note: Begin with the hot tank assembly removed from the dispenser (Figure 5-7-1).



Figure 5-7-1

1. Remove the bolt that tightens the heater band onto the hot tank (10mm wrench) (Figure 5-7-2). Turn the heater band until the opening lines up with the stainless J tube and pull down to remove completely from the hot tank (Figure 5-7-3 and 5-7-6).



Figure 5-7-2



Figure 5-7-3



Figure 5-7-4



Figure 5-7-5



Figure 5-7-6

2. Install the new heater band by following the steps above in reverse order, ensuring that the wire terminals are located near the top of the heater band (Figure 5-7-7). Align the opening in the heater band directly below the sensor and limiter, reinstall the bolt and tighten to 34.71 lbf.in (Figure 5-7-8).



Figure 5-7-7



Figure 5-7-8

3. Refer to the hot tank replacement procedure for installation instructions.

## SECTION 5: Electrical Component

### Diagnosis and Replacement

Notice:

The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.

Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

#### Compressor Relay / Overload Protector Replacement

Note: Begin with the unit unplugged, the water drained and the left side panel removed.

Tip: Use a small flathead screwdriver to pry wire connectors and relay from compressor.

1. Remove the relay/overload cover by prying the metal clip to unhook it from the compressor on both sides (Figure 5-8-1 and 5-8-2).



Figure 5-8-1



Figure 5-8-2

2. Carefully remove and identify the wire connectors from the relay (white wires) and/or overload (black wire) (Figure 5-8-3 and 5-8-4). Remove relay and overload from compressor (Figure 5-8-5 and 5-8-6).



Figure 5-8-3



Figure 5-8-4



Figure 5-8-5



Figure 5-8-6

3. Install the new overload onto the top pin of the compressor (Figure 5-8-7) and push the new relay onto the two bottom pins below the overload (figure 5-8-8). Reconnect the white wires onto the relay (Figure 5-8-9) and the black wire onto the overload (Figure 5-8-10).



Figure 5-8-7



Figure 5-8-8



Figure 5-8-9



Figure 5-8-10

4. Reinstall the cover and secure with the metal clip (Figure 5-8-11). Note: use caution not to damage wires.



Figure 5-8-11

## SECTION 6: Trouble Shooting

### Notice:

The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.

Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

### Water Leaks (checking that the drip tray is not full)

- If water dripping from above, first try to replace the water bottle.
- If water leaking (or not bottle related), unplug Dispenser, remove bottle and call 1-800-878-6422 for assistance

### Water Not Dispensing

- Ensure Hot/Cold tanks have been primed
- Ensure that the water selection lever is fully depressed
- Ensure all internal tubing is free of any holes, cuts or cracks

### Not Cooling

- Optimum cold water temperatures will be reached after 1-2 hours of operation
- Ensure that the dispenser is at least 4 inches (10cm) from the wall to provide sufficient ventilation
- High usage may deplete the cold water reservoir faster than the cooler can cool it
- If the water still isn't cold, please call 1-800-878-6422 for assistance

### No Hot Water

- Optimum hot water temperatures will be reached after 15-20 minutes
- Ensure that the Hot Water Switch (located at the top of the back panel) is turned on (Figure 6-1)



Figure 6-1

- If the water still isn't hot, please call 1-800-878-6422 for assistance

### Dispenser is Noisy

- Ensure that the dispenser is positioned on a flat, level surface
- Ensure that the bottle is not empty. If empty, replace it

## SECTION 7: Cleaning and Sanitization

Notice:

The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.

Never attempt to service or repair a water cooler while it is plugged into any power supply.

Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

Scheduled cleaning and sanitizing is recommended to ensure the integrity of the drinking water. Scheduling will vary depending on the conditions and environment in which the cooler is in use. Follow the steps outlined below for the recommended procedures for sanitizing the water cooler.

**CAUTION: DO NOT IMMERSE THE UNIT IN WATER OR CLEAN USING PRESSURE WASHER.**

1. Use latex or nitrile gloves or wash hands before and after handling water contact parts.
2. Turn off hot tank power switch (located near top cover at top) and unplug the water cooler (Figure 7-1 and Figure 7-2).

**CAUTION: WATER IN HOT TANK IS VERY HOT AND CAN CAUSE SEVERE BURNS. ALLOW SUFFICIENT TIME FOR THE HOT WATER TO COOL BEFORE DRAINING (1-2 HOURS).**



Figure 7-1



Figure 7-2

3. Remove the water bottle (if applicable). Remove the drip tray assembly and set aside for cleaning (Figure 7-3). Press the cover lock and open the top cover (Figure 7-4 and Figure 7-5), remove CrystalFlo™ water cartridge (Figure 7-6).



Figure 7-3



Figure 7-4



Figure 7-5



Figure 7-6

4. To drain the hot tank unscrew the drain cap and remove red silicone plug at the rear of the cooler (Figure 7-7 and 7-8) and drain water into a pail or container (approx 0.5 gallon or 1.8 L) (Figure 7-9). Reinstall red silicone plug and drain cap.

**CAUTION: WATER IN HOT TANK IS VERY HOT AND CAN CAUSE SEVERE BURNS. ALLOW SUFFICIENT TIME FOR THE HOT WATER TO COOL BEFORE DRAINING (1-2 HOURS).**



Figure 7-7



Figure 7-8



Figure 7-9

5. Using only FDA approved sanitizing products, thoroughly clean all water contact parts and drip tray. The use of these products must be in accordance with the manufacturer's safety instructions and recommendations and performed by properly trained personnel.

6. Remove front bottom panel by removing screw and set aside (Figure 7-10 and 7-11). Remove both side panels by removing the four screws (Figure 7-12 and 7-13) and open top cover to lift panels off of locator pins (Figure 7-14 to 7-16). Clean all three panels using only a mild non-abrasive cleaning agent. The use of bleach or abrasive cleaners is not recommended.



Figure 7-10



Figure 7-11



Figure 7-12



Figure 7-13



Figure 7-14



Figure 7-15



Figure 7-16



7. Using the brush attachment, on a vacuum cleaner, clean the condenser and all accessible areas to remove dirt, lint and debris (Figure 7-17 to 7-20) (the use of the crevice tool attachment may also be used). Use a scrub brush to remove dirt and debris from the condenser (Figure 7-21). Use an air hose to remove debris from inaccessible areas (do not exceed 100 PSI) (Figure 7-22 to 7-24). Use a damp cloth to wipe down condenser (Figure 7-25).

**CAUTION: DO NOT CLEAN USING PRESSURE WASHER OR ANY DIRECT WATER CONTACT.**

**CAUTION: DO NOT MOVE CONDENSER MORE THAN 6 INCHES.**

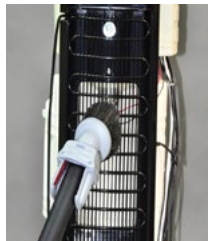


Figure 7-17



Figure 7-18



Figure 7-19



Figure 7-20



Figure 7-21



Figure 7-22



Figure 7-23



Figure 7-24



Figure 7-25

8. Reassemble the side panels and lower front panel by following step 6 in reverse order (Figure 7-26 to 7-32). **Note: the Side Panels are installed prior to the Lower Front Panel.**



Figure 7-26



Figure 7-27



Figure 7-28

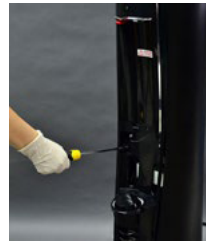


Figure 7-29



Figure 7-30

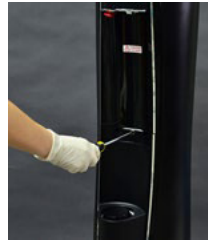


Figure 7-31



Figure 7-32

9. It is recommended that the hot tank be descaled periodically (frequency varies by mineral content). Only the use of citric or acetic acid is recommended for descaling. The use of any other chemicals or agents is not recommended. The use of the descaling agents must be in accordance with the manufacturer's safety instructions and recommendations and performed by properly trained personnel. Note: ensure the hot tank is empty and drain plug and cap are in place (Figure 7-33 and Figure 7-35). Using a funnel, add the descaling solution to the hot tank, filling up to the top of the inlet (approx 38.7oz /1100ml) (Figure 7-36). Allow time for the solution to descale. Drain and dispose of solution according to the manufacturer's instructions (refer to step 4 for draining the hot tank).



Figure 7-33



Figure 7-34



Figure 7-35

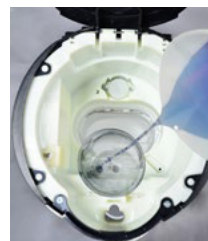


Figure 7-36



10. The upper reservoir support should be wiped clean at this time (Figure 7-36). Using a bottle brush and the sanitizing solution from step 5, clean the hot tank inlet and outlet openings (Figure 7-37 to 7-38). Prior to rinsing the hot tank, position pail or container under drain assembly and using a sanitized funnel; thoroughly rinse the hot tank (Figure 7-39).



Figure 7-36

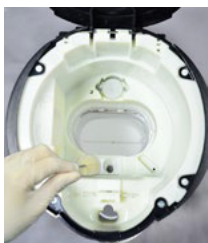


Figure 7-37

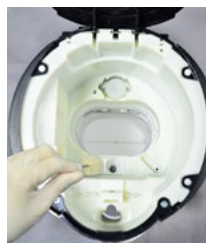


Figure 7-38



Figure 7-39

**Note:** Prior to reassembly, thoroughly rinse and dry all water contact parts that have been removed.

11. Reassemble in reverse order. Ensure all seals/gaskets are reinstalled properly, and install red silicone plug and drain cap (Figure 7-40 and Figure 7-42). The use of air-pressure test equipment is recommended to verify the reassembly process has been done correctly (recommended 1.0~1.2 PSI) (Figure 7-43). Install a new CrystalFlo™ into the cooler (Figure 44 and Figure 45).



Figure 7-40



Figure 7-41



Figure 7-42



Figure 7-43



Figure 7-44



Figure 7-45

12. Place a new bottle on the cooler. **Important:** Prior to plugging in cooler, vent the hot tank by holding the hot faucet open until water flows.

13. Draw one cup of water from each faucet and discard.

14. Plug the cooler in and turn on the hot tank switch (Figure 7-46). Do not draw water from the cooler for 30 minutes to let the water cool and heat. Optimum water temperatures will be reached after 1-2 hours of operation.



Figure 7-46

Crystal Mountain has a policy of continuous development and reserves the right to change specifications without notification.



## SECTION 8: CrystalFlo™ Water Cartridge

The CrystalFlo™ Water Cartridge - Design allows for quick and easy sanitization of the cold water system. The unique patent pending CrystalFlo™ Water Cartridge guarantees 100% sanitization in minutes for Crystal Mountain K2 Bottled Water Dispenser...

**Simple & Quick:** In less than 45 seconds all cold water contact points are exchanged

**Hygienic:** All cold water contact points are exchanged

**100% Sanitization**





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