Crystal Mountain

Service Manual (100-115VDC)

STORM

(Bottom-load water cooler)

Table of Contents

Crystal Mountain

Product Specification

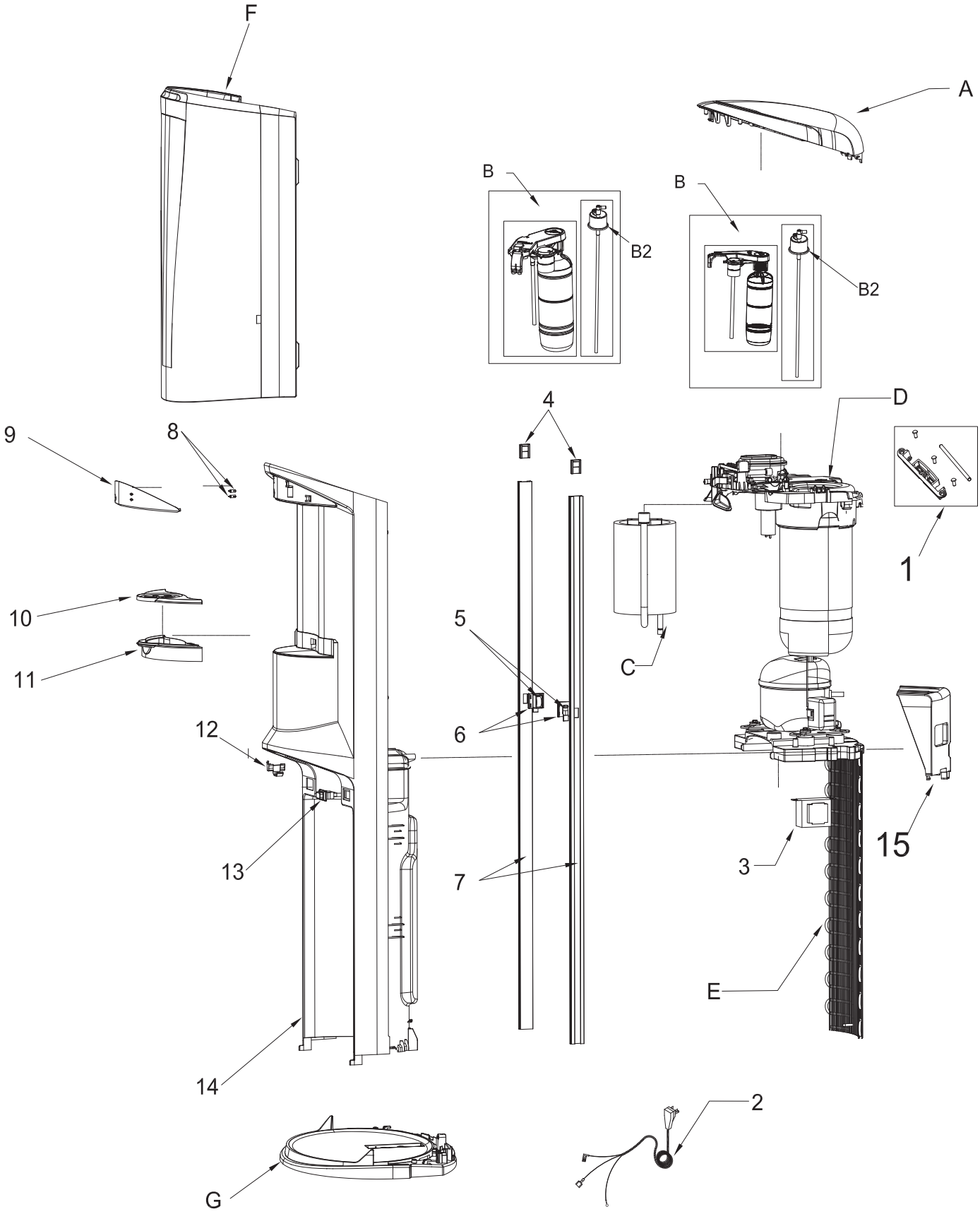
STORM (Bottom-Load)

Our new Bottom-Load water dispenser is the latest model in Crystal Mountain's line of coolers. The Bottom-Load means no more lifting heavy bottles, just open the front door and the bottle slides into the base of the cooler with little effort. The Storm features an easy to remove reservoir system, that takes less than a minute to change. The LED indicator tells you when it needs to be replaced. Servicing has never been easier. With its contemporary design, attractive finish, concealed faucets and easy maintenance, the Storm is sure to dazzle in any environment.

Cooler Specifications

ITEM		SPECIFICATIONS
POWER RATING		SINGLE PHASE
		100-115VAC 60Hz
STANDARD CURRENT		Hot & Cold: 4.8~5.3A
POWER CONSUMPTION	COLD	70W
	HOT	500W
COLD	COMPRESSOR	SINGLE PHASE MOTOR
	REFRIGERANT	R134a
	TEMP RANGE	4-10°C (39.2-50°F)
HOT	HEATER	INTERNAL HEATER
	TEMP RANGE	76°C -92°C (168.8°F -197.6°F)
	SAFETY DEVICE	BIMETAL (MANUAL RESET 95°C (203°F) OFF)
	TEMP CONTROL	BIMETAL 85°C (185°F)
NOISE(SOUND POWER LEVEL)		Pump: 55dB(A); Compressor: 43dB(A)
NET WEIGHT		Hot & Cold: 14.5kg (32.0 lb)
LOADING QUANTITY		20FT: 204UNITS
		40FT: 420UNITS

115V Storm Water Dispenser - Main - 20230919

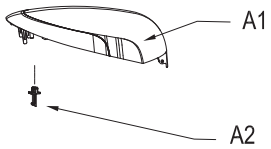


Note: 1. Parts may not appear exactly as shown.
2. Parts shown may not be present on all models.

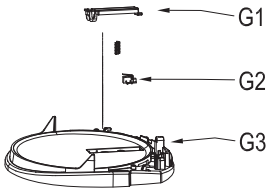
No.	Description	P/N	Replaced by	Effective Date
1	Hinge Cover&Pin(top shelf Accessories) - ST	SUB-C200788		
2	115V Power Cord, Black 45	ELE-C100197		
3	Transformer, 115VAC to 15VDC	ELE-C100208		
4	Spring Block	PLC-C150028		
5	SS Spring, Door	FAS-C100109		
6	Door Spring Holder	PLC-C150027		
7	Door Rail, 1015mm	PLC-C150038		
8	LED Light Tube	PLC-C150055		
9	Storm H&C Face Plate, Black+ Laser Printing (Push/ Replace Bottle/SmartFloTM Plus) - ST AutoFill	SUB-C100526		
10	Drip Tray Cover, Black	PLC-C150012	SUB-C100488	1-Apr-24
11	Drip Tray Base,PC/ABS, Black	PLC-C150212	SUB-C100489	1-Apr-24
12	Clip, Bottle Adaptor, PC/ABS	PLC-C150207		
13	Hot Tank Power Switch	ELE-C000010		
14	ST front panel, sparepart shipment	SUB-C200828		
15	Evaporator Support Bracket	PLC-C150211		

115V Storm Water Dispenser - Assembly Detail

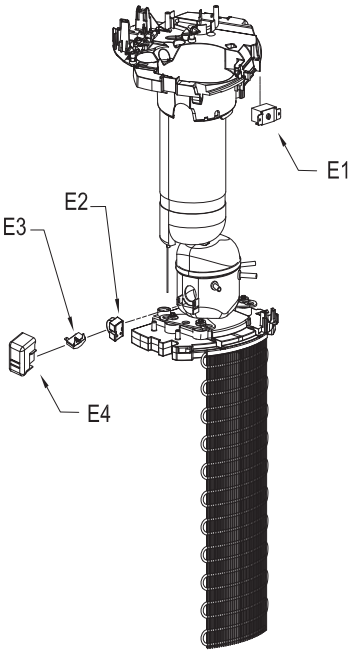
A Top Cover(One Piece Version)Assembly



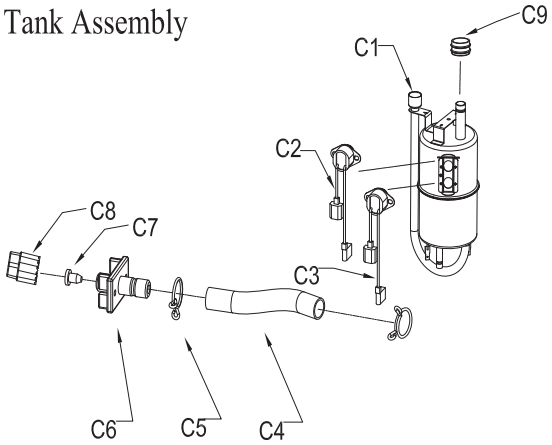
G Base Plate Assembly

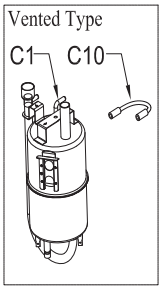


E Refrigeration System

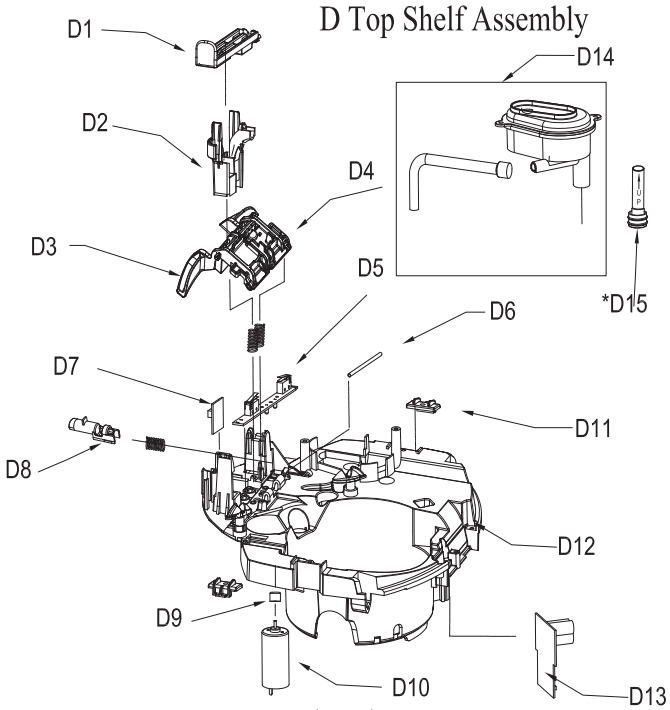


C Hot Tank Assembly

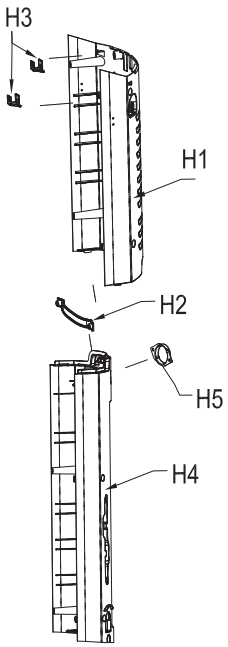




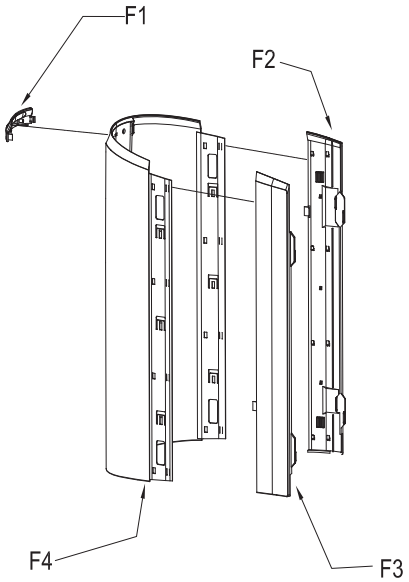
D Top Shelf Assembly



H Back Panel-assembly



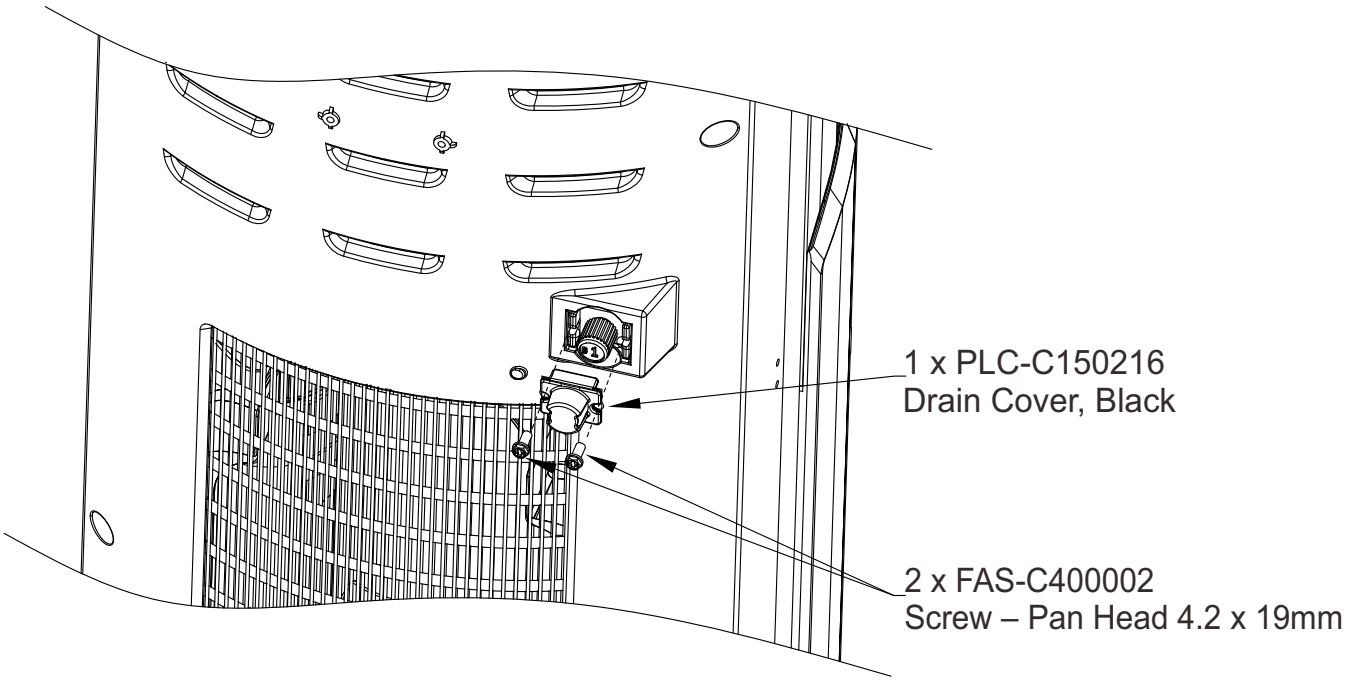
F Door Sub-assembly



Note: 1. Parts may not appear exactly as shown.
2. Parts shown may not be present on all models.

No.	Description		P/N	Replaced by	Effective Date
A	Top Cover Assm, Black(ABS+PC)(one piece) - ST, Sparepart shipment		SUB-C200787		
	A1	Top Cover, One-piece, Storm	PLC-C150252		
	A2	Top Cover Catch, Grey, PC/ABS	PLC-C150206		
B	10PCS Single Package (SmartFlo Plus + Round bottle adaptor ASSY) -NA market, Top loading		SUB-C200950		
	20PCS SmartFlo Plus + Round bottle adaptor ASSY - NA market, Bulk package		SUB-C100524		
	Single pack - SmartFlo Plus		SUB-C100522		
	B2	Bottle Adaptor Assembly (Round) - ST spare part shipment	SUB-C200412		
C	115V Internal HT (vented) Assembly - ST spare part		SUB-C200963		
	C1	115V Hot Tank(VHT) - ST	SMT-C150033		
	C2	85C Auto Reset, Sealed - TB	ELE-C100275	SUB-C100465	1-Apr-24
	C3	93C Auto Reset, Ceramic, Sealed	ELE-C100502	SUB-C100466	1-Apr-24
	C4	Hot Drain Tube, 8mm x 280mm	SIL-C150002		
	C5	Spring Clip, 12mm	FAS-C000029		
	C6	Hot Tank Drain	PLC-C120021		
	C7	Hot Drain Plug, Yellow	SIL-C100154	SUB-C100504	1-Apr-24
	C8	Drain Cap, Hex Head	PLC-C100399	SUB-C100485	1-Apr-24
	C9	Gasket, Hot Tank, Red	SIL-C100149		
	C10	Air Vent Line, ID 2.5mm, L120mm - ST	SIL-C150046		
D	Boxed PC/ABSTop Shelf Assm, H&C - ST		SUB-C200783		
	D1	Latch, Water Outlet	PLC-C150031		
	D2	Water Outlet, Transparent	PLC-C150068		
	D3	ST Cold faucet Assm, sparepart shipment	SUB-C200829		
	D4	ST Hot faucet Assm, sparepart shipment	SUB-C200830		
	D5	PCB, Switch Board	ELE-C100421		
	D6	Hinge Pin, Top Cover	FAS-C100091		
	D7	PCB, LED Indicator	ELE-C100206		
	D8	Safety Button, Red	PLC-C150056		
	D9	Motor Bushing	PLC-C150052		
	D10	12VDC Motor, 1600 RPM	ELE-C100204		
	D11	Door Rail Cap	PLC-C150033		
	D12	Top Shelf, Grey, PC/ABS	PLC-C150208		
	D13	Main PCBA - Storm, AutoFill	ELE-C100571		
	D14	Storm New Steam Valve Assembly - spare part shipment	SUB-C200414	SUB-C100510	1-Apr-24
	* D15	Adaptor Fitting/tube which for old hot tank(short outlet tube)	SMT-C150006 /SIL-C120006		
		Storm Faucet Kit hot and cold	SUB-C300001		
E	115V Refrigeration System Replacement Parts				
	E1	WP4V Cold Thermostat	REF-C100035		
	E2	Relay, Huayi, B25H5(AL)	REF-C100168		
		Relay,Danfu PW2.5DV	REF-C100229	SUB-C100496	1-Apr-24
	E3	Overload, Huayi, B25H5	REF-C100167	SUB-C100494	1-Apr-24
		Overload, Danfu PW2.0DVMF	REF-C100395		
	E4	Cover, Huayi, B25H5	REF-C100164		
		Cover Danfu PW2.5DV	REF-C100301		
F	Storm Door Assm - spare part shipment, Black/UV coating (No Logo)		SUB-C200233		
	F1	Grey paint +UV coating, Zeolite A	PLC-C150015		
	F2	Door Slider, Left	PLC-C150010		
	F3	Door Slider, Right	PLC-C150009		
	F4	Door window	PLC-C150016		
G	Black Base Plate Assm, ABS/PC - ST,Sparepart shipment		SUB-C200786		
	G1	Bottle Low Indicator, Black	PLC-C150041		
	G2	PCB, Bottle Low Indicator	ELE-C100209		
	G3	Base Plate, Black, PC/ABS	PLC-C150204		
H	ST Back Panel, Sparepart shipment		SUB-C200827		
	H1	Back Panel, Upper	PLC-C150195		
	H2	Back Panel, Handle, Black	PLC-C150197		
	H3	Adaptor, Back Panel, Black	PLC-C150198		
	H4	Back Panel, Lower	PLC-C150196		
	H5	HT Drain Cover, Two Piece Back Panel	PLC-C150217 /SUB-C201002		

DRAIN COVER INSTALLATION

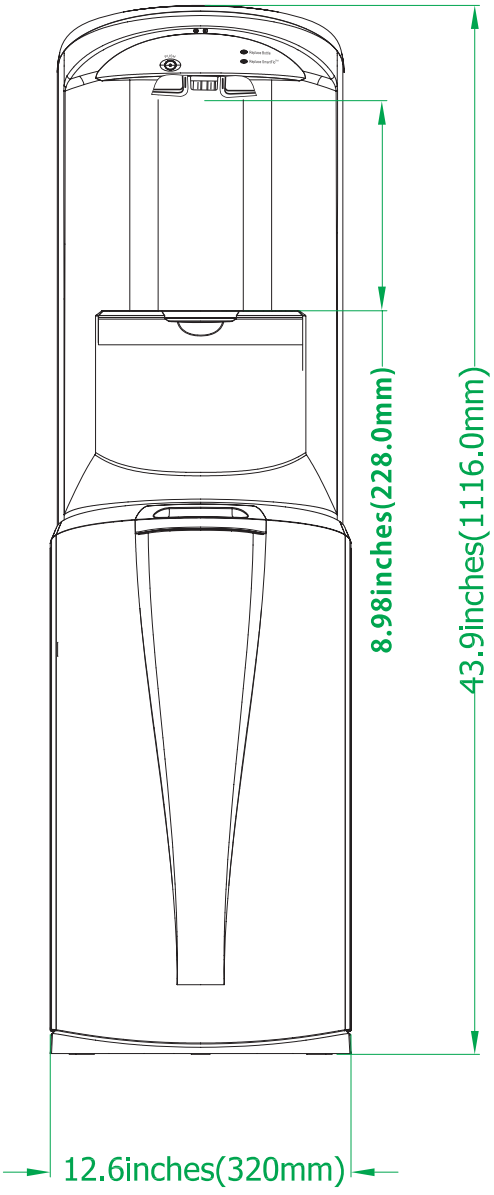


Note: Screw Installation Torque 4.5kgf.cm（3.9 in.lb)

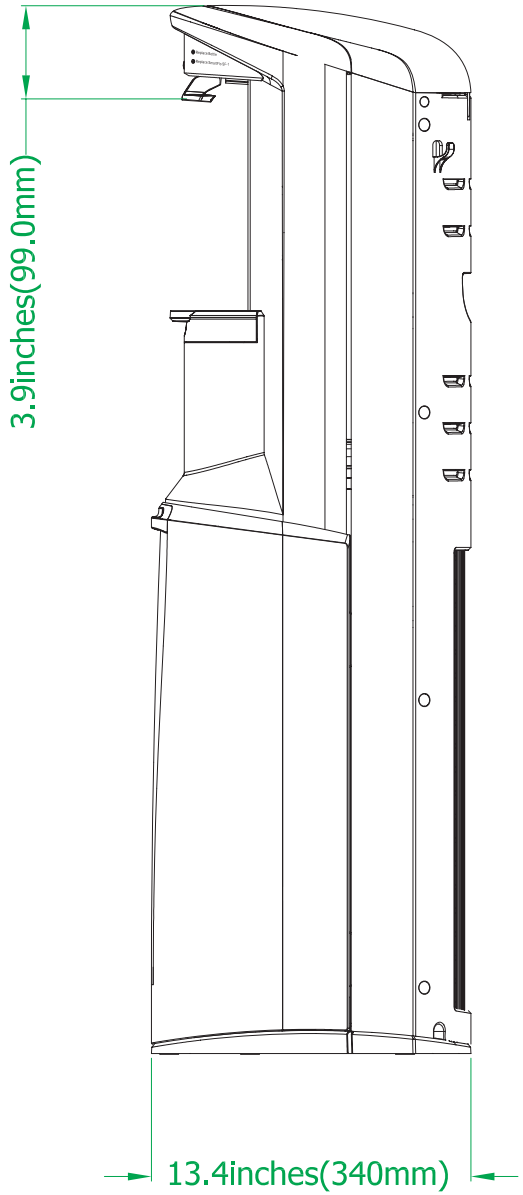
SUB-C200738 - 20 Set Bulk Pack - ST Drain Cover
SUB-C200739 - 100 Set Bulk Pack - ST Drain Cover

Product Dimensions

Storm (Bottom-Load)



Front



Side

Crystal Mountain

Description of Product Model Number

ST	F	M	2	K	H	K	1	C
Cooler Shape	Reservoir Type	Type of Lid	No. of Faucets	Body Color	Temp. Option	Insert Color	Voltage	Option
ST – Storm	F– SmartFlo SF-1 Water Cartridge	M –Manifold		K – Black	H – Hot & Cold	K – Black	1 – 110~115V	C – Made in China

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

Replacement of SmartFlo™ Water Cartridge

Notice:
The information and/or procedures presented in the following demonstration(s) should be performed by a trained Water Cooler Service Technician only.
Prior to any service or repair of the water cooler, ensure that the water has been completely drained from the system.

For the best tasting and highest quality water, it is recommended to change the SmartFlo™ Water Cartridge every 6 months. Follow the steps below to replace the SmartFlo™ Water Cartridge. It is recommended to empty the bottle prior to replacement of the SmartFlo™ Water Cartridge and bottle adaptor.
Note: A flashing blue light above the cold water lever will alert you to when the SmartFlo™ Water Cartridge should be replaced. The system has been pre-set to provide indication after a period of 6 months of use. User may operate the cooler as normal until the bottle has been emptied.

Note: To reset the life timer system, the SmartFlo™ 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. Open Dispenser door (Figure 3-1). (Slide door upwards to allow access to bottle area)

Figure 3-1

2. Slide empty bottle out of cabinet (Figure 3-2 and Figure 3-3).

Figure 3-2

Figure 3-3

3. Disconnect the water line from the bottle adaptor (Figure 3-4).

Figure 3-4

4. Open the replacement SmartFlo™ Water Cartridge kit, and remove the access key provided.

5. Insert the access key into the 2 holes located at the underside of the top edge of the cooler (above water levers) and push inwards (Figure 3-5 and Figure 3-6)(once unlocked, the front of the top cover opens upwards).

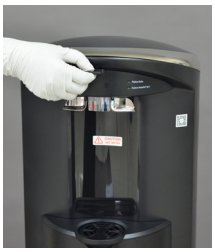


Figure 3-5

Figure 3-6

6. Place a glass or other container below the water outlets (to catch drips), and unlatch the locking clip located near the front of the cooler to release the water tubing (Figure 3-7).

Figure 3-7

7. Unlock the turn knobs which hold down the SmartFlo™ Water Cartridge (Figure 3-8).

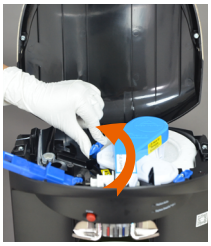


Figure 3-8

8. Pull SmartFlo™ Water Cartridge upwards to remove (Figure 3-9).

Figure 3-9

9. Discard used SmartFlo™ Water Cartridge according to local regulations. (Whenever possible, please recycle).

10. Insert water line of replacement SmartFlo™ Water Cartridge through the guide tube, and push through to bottle installation area (Figure 3-10).

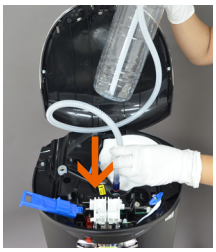


Figure 3-10

11. Ensure gasket/seal is properly installed on the outlet tube of the SmartFlo™ Water Cartridge assembly (may have shifted during shipment or un-packaging) (Figure 3-11).
12. Align SmartFlo™ Water Cartridge with openings in cooler, and push into place (Figure 3-12 and Figure 3-13).
13. Rotate turn knobs to lock SmartFlo™ Water Cartridge in place (Figure 3-14).

Figure 3-11

Figure 3-12

Figure 3-13

Figure 3-14

14. Close the locking clip to secure water outlet tubing in place (Figure 3-15).

Figure 3-15

15. Close the top cover of the cooler (Figure 3-16) (push downwards to lock into place).

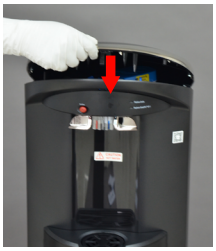


Figure 3-16

16. Place fresh bottle outside of the cabinet.

17. Clean the outside of new bottle with a cloth (Figure 3-17). Remove security label/seal from the bottle cap (if applicable).

Figure 3-17

18. Remove bottle adaptor assembly from the empty bottle, and set aside (Figure 3-18) .Carefully un-package the Bottle Adaptor assembly (located in the bottle storage area), avoiding touching the tube.

Note: to maintain sanitization of the system, refrain from touching the section of the bottle adaptor tube that is inserted into the bottle.

Figure 3-18

19. Without touching the tube, install the Spike Cap (with the end of the tube in the Spike Cap) (Figure 3-19 and Figure 3-20)

Figure 3-19

Figure 3-20

20. Push the tube to go through the Spike Cap, until it is close/hits bottom of the bottle (Figure 3-21)

Figure 3-21

21. Remove red protective cap from the blue tube of the Smartflo™ Water Cartridge and install onto the bottle adaptor assembly (Figure 3-22).

Figure 3-22

22. Slide bottle into cabinet and close the door (Figure 3-23 to Figure 3-24) (slide door downwards to close)

Figure 3-23

Figure 3-24

23. Depress the Cold or Hot water lever to fill the respective tanks (Figure 3-25 and Figure 3-26). When water begins to flow from both faucets, the tanks have been filled (approximately 1 minute per tank although it may be less time).

Figure 3-25

Figure 3-26

Install and Change Water Bottle

Install Water Bottle

1. Open Dispenser door (Figure 4-1). (slide door upwards to allow access to bottle area).

Figure 4-1

2. Place fresh bottle outside of the cabinet.
3. Clean the outside of new bottle with a cloth (Figure 4-2).

Figure 4-2

4. Remove security label/seal from the bottle cap (if applicable) and install Spike Cap through the bottle cap (do not remove Bottle Cap) and press down to secure (Figure 4-3 and Figure 4-4).

Figure 4-3

Figure 4-4

5. Insert the Bottle adaptor assembly through Spike cap until tube hits bottom of the bottle (Figure 4-5 and Figure 4-6).

Figure 4-5

Figure 4-6

6. Remove the red protective cap from the blue tube of SmartFlo™ Water Cartridge and install onto the bottle adaptor assembly (Figure 4-7).

Figure 4-7

7. Slide bottle into cabinet (Figure 4-8) and close the door (slide door downwards to close).

Figure 4-8

Bottle Change

A flashing red light above the cold water lever will alert you when your water bottle is getting low. The bottle will need to be replaced shortly. Water may be dispensed normally until empty (no water flows from water outlet when levers are depressed).

1. Open Dispenser door (Figure 4-9). (Slide door upwards to allow access to bottle area).

Figure 4-9

2. Slide empty bottle out of cabinet (Figure 4-10).

Figure 4-10

3. Place fresh bottle outside of the cabinet.
4. Clean the outside of new bottle with a cloth (Figure 4-11). Remove security label/seal from the bottle cap (if applicable).

Figure 4-11

5. Remove bottle adaptor and Spike Cap from the empty bottle (Figure 4-12) and remove the cap from the Hose Assembly (Figure 4-13).
Note: to maintain sanitization of the system, refrain from touching the section of the bottle adaptor tube that is inserted into the bottle.

Figure 4-12

Figure 4-13

6. Install Spike Cap through the bottle cap (do not remove Bottle Cap) and press down to secure (Figure 4-14 and Figure 4-15).

Figure 4-14

Figure 4-15

7. Insert the Bottle adaptor assembly through Spike cap until tube hits bottom of the bottle (Figure 4-16 and Figure 4-17).

Figure 4-16

Figure 4-17

8. Slide bottle into cabinet and close the door (Figure 4-18 to Figure 4-20) (slide door downwards to close).

Figure 4-18

Figure 4-19

Figure 4-20

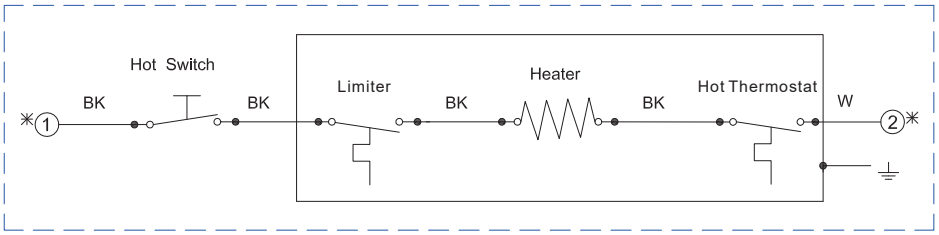
9. Place a container under faucet and dispense cold water until a smooth stream of water is dispensed (may take up to 1 minute).

SECTION 5 Electrical Component Diagnosis and Replacement

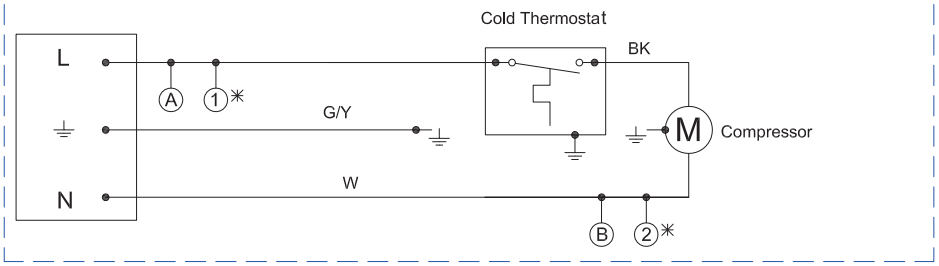
Wiring and Schematics

Models: Storm Hot & Cold water cooler

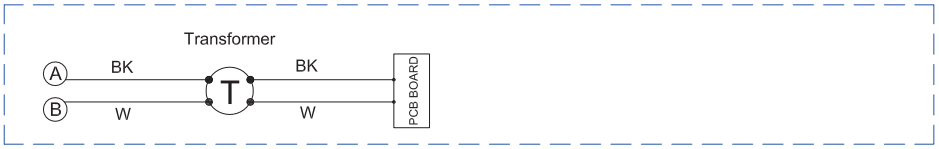
Hot Water System



Cold Water System

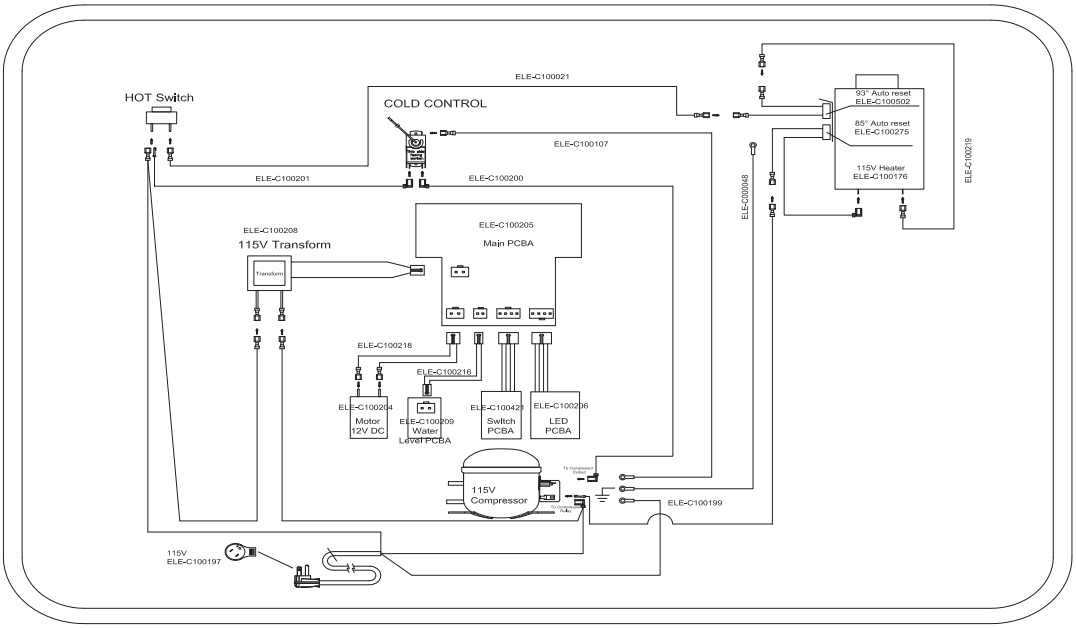


PCB System



● Terminal Connection

✳ Note:Ballooned numbers are only applicable to Hot & Cold model units.



Cold Thermostat 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.

1. Turn off hot tank power switch (located on the front panel and behind the door) (Figure 5-2-1) and unplug the water cooler.

Figure 5-2-1

2. Remove the back panels from the water cooler.
3. Remove the 2 mounting screws from the cold thermostat (Figure 5-2-2 and Figure 5-2-3).

Figure 5-2-2

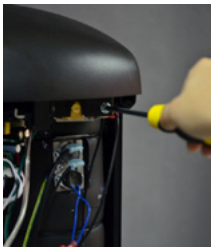


Figure 5-2-3

4. Remove cold thermostat from the plastic shelf (Figure 5-2-4).

Figure 5-2-4

5. Remove the terminals from the thermostat, taking care to identify where which terminals are installed (Figure 5-2-5, Figure 5-2-6 and Figure 5-2-7).

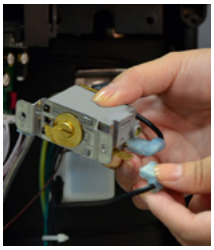


Figure 5-2-5

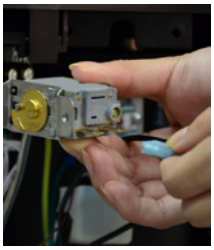


Figure 5-2-6

Figure 5-2-7

6. Cut the small plastic tie strap (holding cold thermostat sensor to evaporator insulation)(Figure 5-2-8).

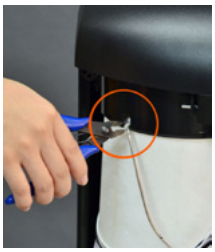


Figure 5-2-8

7. Pull the sensor tube out from the Evaporator Insulation to remove (Figure 5-2-9).
Note: If required, install the Sensor tube cover onto the replacement cold thermostat.

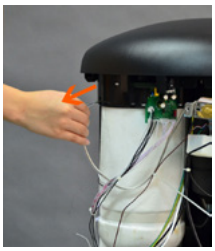


Figure 5-2-9

8. Install the replacement cold thermostat into the evaporator insulation (insertion length approximately 5 inches/125mm) (Figure 5-2-10).
Note: Care should be taken while installing the sensor tube that the protective cover within the evaporator insulation is in the proper position.

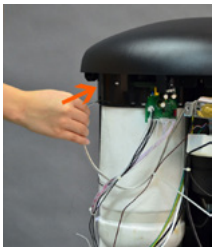


Figure 5-2-10

9. Install a replacement plastic tie to hold the sensor within the evaporator insulation.

10. Reinstall the wire terminals onto the Cold Thermostat (take care to ensure proper installation location).

11. Reinstall screws on the cold thermostat to the plastic shelf.

12. Reinstall back panel. Plug the cooler and switch on.

Note: Ensure proper thermostat setting (see section for Cold Thermostat setting).

Cold Thermostat Adjustment

Note:

The cold thermostat can be adjusted without removal of any panel. Adjustment screw is on the back top side (when viewed from the back of the cooler, see Figure 5-3-1).

Factory Setting: 6:00

Note: To identify the 6:00 setting position, rotate the set screw clockwise until it has stopped (screw should turn with light pressure, do not force). The top of the slotted screw is (now) in the 12:00 position. Rotate the screw counterclockwise 180 degrees to set to the 6:00 position (Figure 5-3-1).

Figure 5-3-1

To make the water colder, rotate the screw in the clockwise direction approximately 1 hour position. Allow the cooler to stabilize for 2-3 hours to ensure proper temperature of the cold water. (Note: do not change the setting by more than 1 hour setting at a time to prevent freezing).
To make the water warmer, rotate the screw in the counter-clockwise direction approximately 1 hour position. Allow the cooler to stabilize for 2-3 hours to ensure the proper temperature of the cold water.

Hot Tank Auto Reset 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.

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

1. Remove the wire terminals (Red wire) from the 85C Auto Reset and identify (Figure 5-4-2, 5-4-3, 5-4-4) (Tip: press the pin showing on Figure 5-4-1 to remove the wire connector)


Figure 5-4-1


Figure 5-4-2


Figure 5-4-3


Figure 5-4-4

2. Remove the two screws. Remove the 85C Auto Reset from its bracket (Figure 5-4-5).

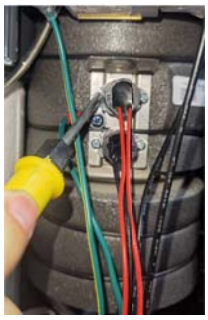


Figure 5-4-5

3. Remove the wire terminals (Black wire) from the 93C Auto Reset and identify (Figure 5-4-6, 5-4-7)


Figure 5-4-6


Figure 5-4-7

4. Remove the two screws. Remove the 93C Auto Reset from its bracket (Figure 5-4-8).


Figure 5-4-8

5. There is enough heat transfer paste on the tank and old Auto Reset to simply wipe the face of new Auto Reset against the old one (Figure 5-4-9). Place into position and evenly tighten the two screws (torque to 3.4~6.9 lbf.in).

Figure 5-4-9

6. Reconnect the wires onto the Auto Reset as identified.

Hot Tank Removal 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.

Note: Begin with the unit unplugged, the water drained and the back panel removed.
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).
Tip: Use a small flathead screwdriver to pry wire connectors off.

1. Use key (an accessory of the cooler) to open the top cover. Release and open the latch (Figure 5-5-1). Turn to relax the 2 locking buttons (Figure 5-5-2 and Figure 5-5-3). Pull off theSmartFlo™ Water Cartridge approx 4-6 inch high (Figure 5-5-4).


Figure 5-5-1


Figure 5-5-2


Figure 5-5-3


Figure 5-5-4

2. Nip the two clips to remove the transparent outlet (Figure 5-5-5). Remove the 2 screws (Figure 5-5-6). Remove the steam valve and transparent outlet from top shelf (Figure 5-5-7).


Figure 5-5-5

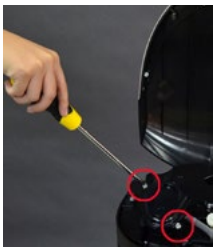


Figure 5-5-6


Figure 5-5-7

3. Remove the 4 screws of thermostats (Figure 5-5-8). Note: Keep the thermostats away from other things to prevent heat-transfer grease from being wiped off. Remove the ground wire from the hot tank (Figure 5-5-9).
Remove and identify the 2 terminals at the bottom of hot tank.
Note: The terminals may be difficult to remove. Set an approx 1x1 inch (crossing size) block between the flathead screw driver and hot tank bottom, it may be easier to operate.

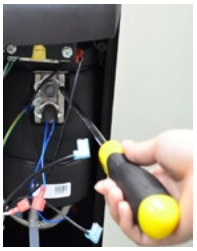


Figure 5-5-8


Figure 5-5-9

4. Relax and remove the spring clip by using a plier (Figure 5-5-10). Remove the drain hose from hot tank, if necessary.

Note: Hose may be difficult to remove. If necessary, use a flathead screwdriver to slide up between the tube and pipe to release the hoses. Be careful not to damage hose.

Figure 5-5-10

5. With holding the hot tank on one hand, remove the 3 screws on the top shelf for hot tank (Figure 5-5-11).

Figure 5-5-11

6. Remove the hot tank from cooler (Figure 5-5-12).

Figure 5-5-12

7. While holding the new hot tank with one hand, align both tubes with the corresponding holes (figure 5-5-13 and figure 5-5-14). Tighten the three screws to attach the hot tank properly.

Figure 5-5-13

Figure 5-5-14

8. Reconnect the drain hose and spring clips. Reconnect all wires as identified, if necessary refer to the wiring diagram. Reinstall the steam valve and transparent outlet to top shelf. (Note: Make sure the silicon seal on steam valve tube is installed properly.) Reinstall theSmartFlo™ SF-1 Water Cartridge and turn the buttons to lock in place. Close and latch the locking arm. Close top cover. Reinstall the back panel.

9. Plug the cooler back into power outlet. Push hot safety button and press the hot water faucet lever until water comes out (Figure 5-5-15).

CAUTION: TO PREVENT DAMAGE TO THE HOT TANK, DO NOT SWITCH ON IF THE HOT TANK IS EMPTY.

Figure 5-5-15

10. Slide door upwards to open. Turn the hot tank power switch ON and close the door.

Compressor Relay / Overload Protector 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.

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

Tip: Use a small flathead screwdriver to pry wire terminals 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 5-6-1 and Figure 5-6-2).

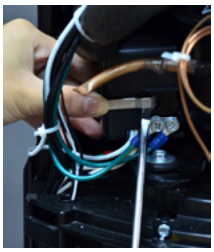


Figure 5-6-1


Figure 5-6-2

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


Figure 5-6-3


Figure 5-6-4

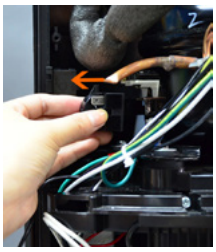


Figure 5-6-5

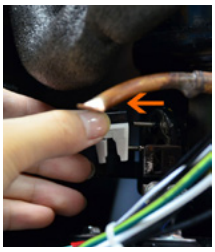


Figure 5-6-6

3. Install the new overload (Figure 5-6-7) onto the top pin of the compressor (Figure 5-6-8) and push the new relay (Figure 5-6-9) onto the two bottom pins below the overload (Figure 5-6-10). Reconnect the white wires onto the relay and the black wire onto the overload (Figure 5-6-11).


Figure 5-6-7

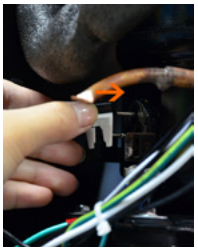


Figure 5-6-8


Figure 5-6-9

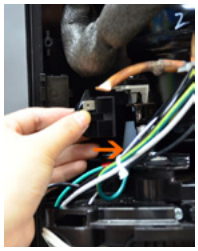


Figure 5-6-10


Figure 5-6-11

4. Reinstall the cover (Figure 5-6-12) and secure with the metal clip (Figure 5-6-13). Note: use caution not to damage wires.

Figure 5-6-12

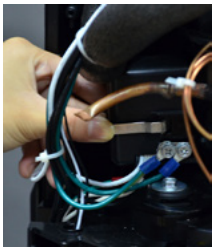


Figure 5-6-13

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

. If water present only at base of unit (not dripping from above), first try to replace the water bottle.

. If water leaking from above the bottle (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 (see section for priming of water system)

. Ensure bottle is not empty. If empty, replace it

. Ensure that the water selection lever is fully depressed

. Ensure all tubing is free of holes, cuts or cracks and is not kinked or crimped

. Ensure SmartFlo™ Water Cartridge locking knobs (in top) are securely locked in place

Not Cooling

. Optimum cold water temperatures will be reached after several hours of operation

. Ensure that the dispenser is at least 4 inches (100mm) from the wall to provide sufficient ventilation

. 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 behind top right side of bottle access door) is turned on

. 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

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.
The frequency of cleaning will vary depending on the conditions and environment.
Follow the steps outlined below 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. Remove drip tray assembly and set aside for cleaning (Figure 7-1).

Figure 7-1

3. Lift door up to open it properly (Figure 7-2). Turn off hot tank power switch (Figure 7-3) and unplug the water cooler (Figure 7-4).

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 7-2

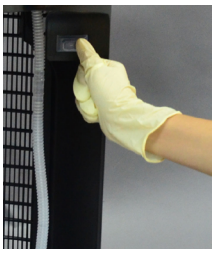


Figure 7-3

Figure 7-4

4. Take water bottle out from its base. (Caution: don't break the corrugated tube.) Remove the connector from bottle adaptor (Figure 7-5).

Figure 7-5

5. Use top cover key (an accessory of cooler, Figure 7-6), insert into the two holes (on the front top, at approx 2 inch above and to the right of hot water safety button) towards the cooler, push key to open top cover (Figure 7-7 and Figure 7-8).


Figure 7-6

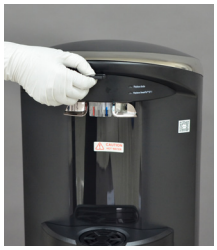


Figure 7-7


Figure 7-8

6. Nip the hook and latch's end to open the latch (Figure 7-9 and Figure 7-10). Turn counter-clockwise to release the 2 knobs (Figure 7-11 and Figure 7-12). Pull to removeSmartFlo™ Water Cartridge and set aside (Figure 7-13 and Figure 7-14).


Figure 7-9


Figure 7-10

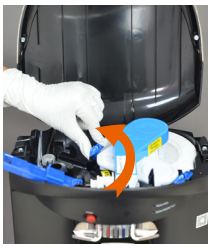


Figure 7-11


Figure 7-12


Figure 7-13


Figure 7-14

7. To drain the hot tank unscrew drain cap and remove red silicone plug at the rear of the cooler (Figure 7-15 and Figure 7-17). Drain water into a pail or container (approx 0.5 gallon or 1.8 L) (Figure 7-18). Re-install red silicone plug and drain cap.


Figure 7-15


Figure 7-16


Figure 7-17


Figure 7-18

8. It is recommended that the hot tank be descaled periodically (frequency varies by mineral content). Only the use of descaling agents that are compatible with 304 grade stainless steel are 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 7-19 and Figure 7-21). Using a funnel, add the descaling solution to the hot tank, filling up to the top of the inlet (approx 38.7oz /1100ml) (inlet position refer to Figure 7-22). Allow time for the solution to descale. Drain and dispose of solution according to the manufacturer's instructions (refer to step 7 for draining the hot tank).


Figure 7-19


Figure 7-20


Figure 7-21


Figure 7-22

9. Clean evaporator with a cloth (Figure 7-23).


Figure 7-23

10. Using the brush attachment, vacuum the condenser and all accessible areas to remove dirt, lint and debris. Or: Use a stiff ***non-metallic*** scrub brush to remove dirt and debris from the condenser. Use a damp cloth to wipe down condenser (Figure 7-24).
CAUTION: DO NOT CLEAN USING PRESSURE WASHER OR ANY DIRECT WATER CONTACT.


Figure 7-24

11. Lift door up to open properly. Brush, vacuum and wipe to clean the interior of condenser (Figure 7-25 and Figure 7-26), refer to chapter 9.


Figure 7-25

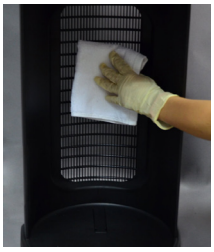


Figure 7-26

12. Reinstall or install a newSmartFlo™ Water Cartridge. Install the connector and corrugated tube into the inlet through cooler to bottom (Figure 7-27 and Figure 7-28). Insert the reservoir into evaporator (Figure 7-29). Ensure theSmartFlo™ Water Cartridge is installed properly. Turn the 2 knob to lock theSmartFlo™ Water Cartridge (Figure 7-30 and Figure 7-31). Close and latch the locking arm (Figure 7-32).


Figure 7-27


Figure 7-28


Figure 7-29


Figure 7-30


Figure 7-31


Figure 7-32

13. Install the hose connector to bottle adaptor (Figure 7-33). Put the water bottle into the bottom of the cooler. NOTE: The tube should droop naturally. Be careful that the tubing is not inserted into the water bottle handle, if applicable (Figure 7-34 and Figure 7-35).


Figure 7-33

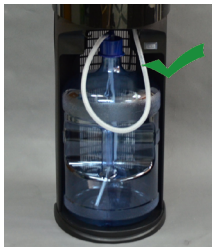


Figure 7-34


Figure 7-35

14. Close the top cover and lower the door to close. Clean the drip tray assembly and install it back onto cooler. Plug the cooler back into the power outlet. Push hot safety button and press the hot water faucet lever, to activate water flow. Keep pressing the hot water faucet lever until water comes out (Figure 7-36).


Figure 7-36

15. Lift the door to open properly. Turn the hot tank power switch ON. Slide downwards to close the door. CAUTION: TO PREVENT DAMAGE TO THE HOT TANK, DO NOT SWITCH ON IF HOT TANK IS EMPTY.

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