



Crystal Mountain

Service Manual (100-115VDC)



STORM

(Bottom-load water cooler)

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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



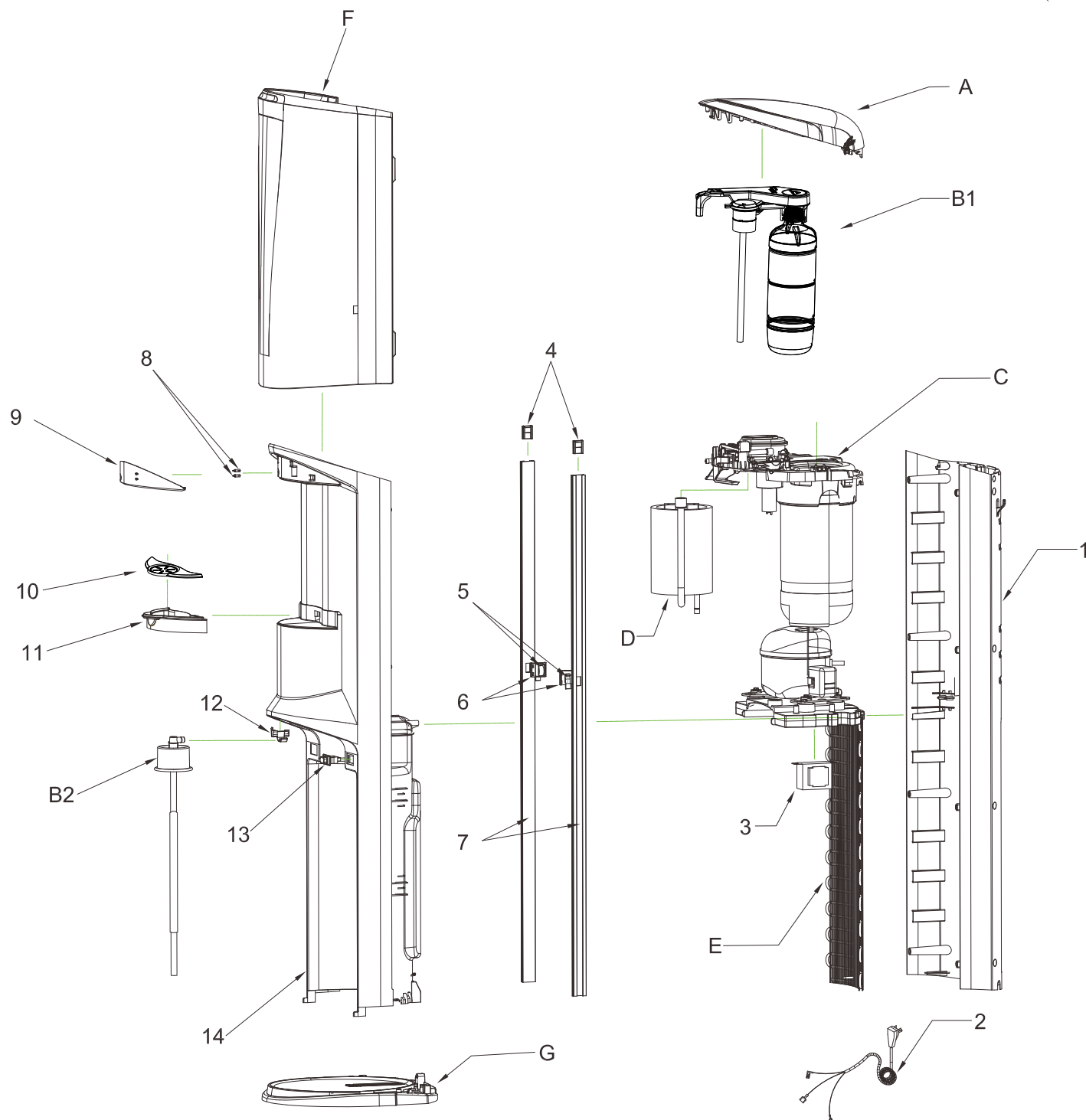
115V Storm Bottled Water Cooler Parts Listing

MODEL--STFM2KHK1C

NO.	DESCRIPTION	PART CODE	NO.	DESCRIPTION	PART CODE
1	BACK PANEL, BLACK	PLC-C150002	C	C9 DOOR RAIL CAP	PLC-C150033
2	115V POWER CORD, BLACK 45	ELE-C100197		C10 L SHAPE HINGE PIN, 3MM X 34MM	FAS-C100113
3	TRANSFORMER, 115VAC TO 15VDC	ELE-C100208		C11 12VDC MOTOR, 1600 RPM	ELE-C100204
4	SPRING BLOCK	PLC-C150028		C12 MOTOR BUSHING	PLC-C150052
5	SS SPRING, DOOR	FAS-C100109		C13 PCB, CONTROL BOARD	ELE-C100205
6	DOOR SPRING HOLDER	PLC-C150027		C14 NEW STEAM VALVE ASSEMBLY-ST	SUB-C200414
7	DOOR RAIL, 1015MM	PLC-C150038		C15 PINCH TUBE, HOT - 7MM X 172MM	SIL-C150004
8	LED LIGHT TUBE - ST	PLC-C150055			
9	H&C FACE PLATE, BLACK+ PRINTING (WHITE)	SUB-C200277			
10	DRIP TRAY COVER, BLACK	PLC-C150012	D	115V HOT TANK + ELECTRICAL ASSEMBLY (INTERNAL 500W)	SUB-C200230
11	DRIP TRAY BASE, DEEP VERSION, BLACK	PLC-C150111		D1 SEAL, MANIFOLD INLET/OUTLET - OD18 X 11MM	SIL-C120006
12	CLIP, BOTTLE ADAPTOR	PLC-C150054		D2 98C CERAMIC MANUAL RESET	ELE-C100170
13	HOT TANK POWER SWITCH	ELE-C000010		D3 85C AUTO RESET, SEALED - TB	ELE-C100275
14	FRONT PANEL, BLACK - ST	PLC-C150004		D4 HOT DRAIN TUBE - 8MM X 280MM	SIL-C150002
A	TOP COVER ASSM, BLACK/CHROME - BLC	SUB-C200232		D5 SPRING CLIP - 12MM	FAS-C000029
	A1 TOP COVER TRIM, CHROME	PLC-C150014		D6 HOT TANK DRAIN - SUBLIM'O	PLC-C120021
	A2 TOP COVER, BLACK	PLC-C150005		D7 HT DRAIN CAP + SEAL	SUB-C000182
	A3 TOP COVER CATCH	PLC-C150025			
B2	BOTTLE ADAPTOR ASSEMBLY	SUB-C200235	E	115V REFRIGERATION SYSTEM REPLACEMENT PARTS	N/A
				E1 WP4V COLD THERMOSTAT	REF-C100035
				E2 115V COMPRESSOR RELAY - B25H5	REF-C100168
				E3 115V HUAYI COMP PROTECTOR - B25H5	REF-C100167
				E4 COVER, HUAYI B25H5	REF-C100164
C	UPPER SHELF ASSEMBLY	SUB-C200228	F	DOOR ASSEMBLY	SUB-C200233
	C1 LATCH, WATER OUTLET	PLC-C150031		F1 DOOR HANDLE, CHROME	PLC-C150015
	C2 NEW COLD FAUCET LEVER ASSY.(BLUE)	SUB-C200447		F2 DOOR SLIDER-LH, BLACK	PLC-C150010
	C3 NEW HOT FAUCET LEVER ASSY.(RED)	SUB-C200445		F3 DOOR SLIDER-RH, BLACK	PLC-C150009
	C4 HOT FAUCET LEVER(RED)	SUB-C200275		F4 DOOR WINDOW, BLACK	PLC-C150016
	C5 PCB, SWITCH BOARD	ELE-C100207			
	C6 HINGE PIN, TOP COVER - EV	FAS-C100091	G	BASE PLATE ASSEMBLY	SUB-C200225
	C7 PCB, LED INDICATOR	ELE-C100206		G1 BOTTLE LOW INDICATOR, BLACK	PLC-C150041
	C8 SAFETY BUTTON, RED	PLC-C150056		G2 PCB, BOTTLE LOW INDICATOR	ELE-C100209
	20PCS SmartFlo™ IN ONE BULK BOX	SUB-C200343		G3 BASE PLATE, BLACK	PLC-C150001
	9PCS SmartFlo™ IN ONE BULK BOX	SUB-C200344			

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MODEL - STFM2KHK1C
STORM BOTTLED WATER COOLER (MAIN)



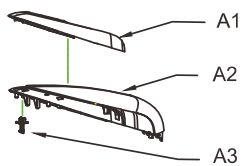
Note: 1. Parts may not appear exactly as shown.
2. Parts shown may not be present on all models.



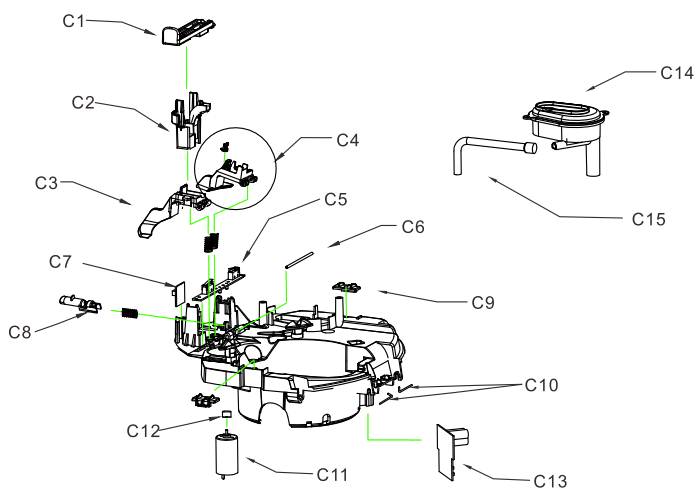
MODEL - STFM2KHK1C

(TOP COVER ASSEMBLY, UPPER SHELF ASSEMBLY, HOT TANK ASSEMBLY, REFRIGERATION SYSTEM, DOOR SUB-ASSEMBLY AND BASE PLATE ASSEMBLY)

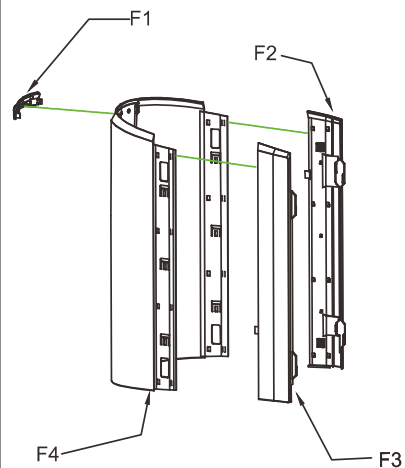
A Top Cover Assembly



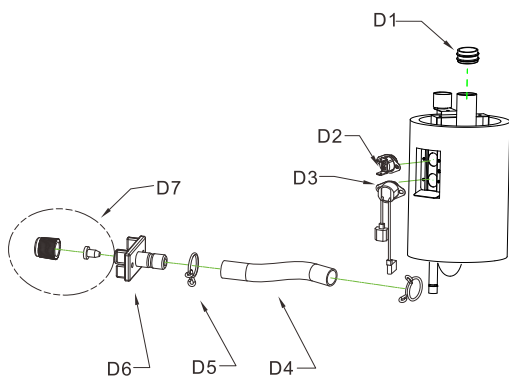
C Upper Shelf Assembly



F Door Sub-assembly

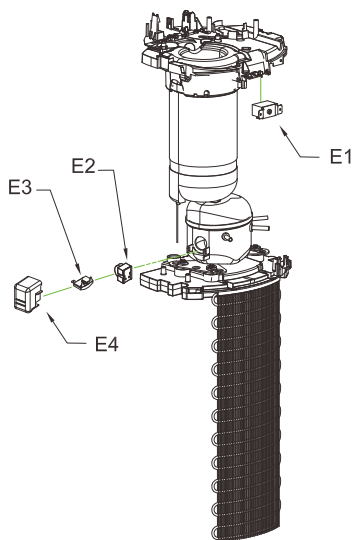


D Hot Tank Assembly

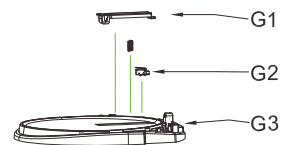


Note: 1. Parts may not appear exactly as shown.
2. Parts shown may not be present on all models.

E Refrigeration System

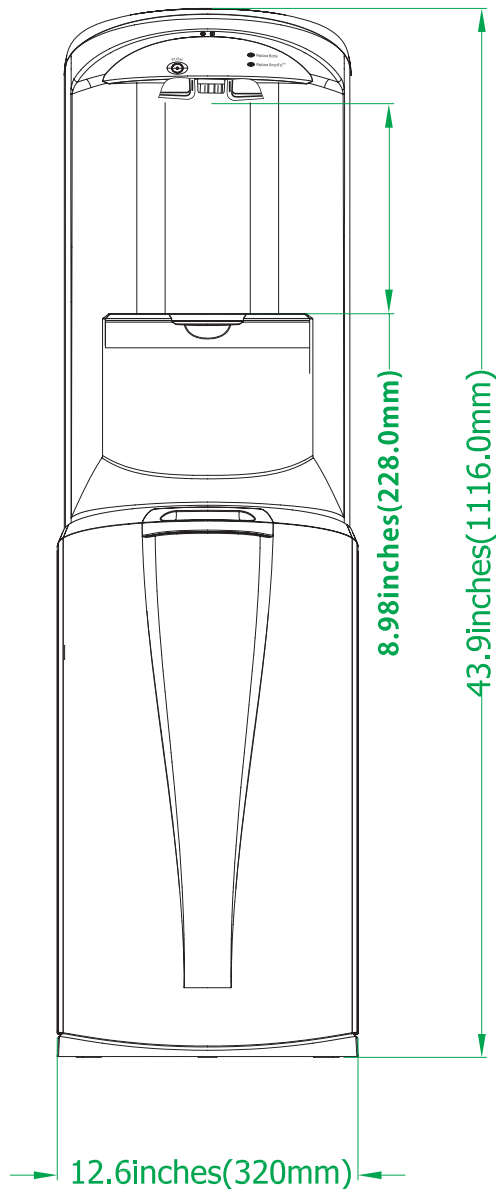


G Base Plate Assembly

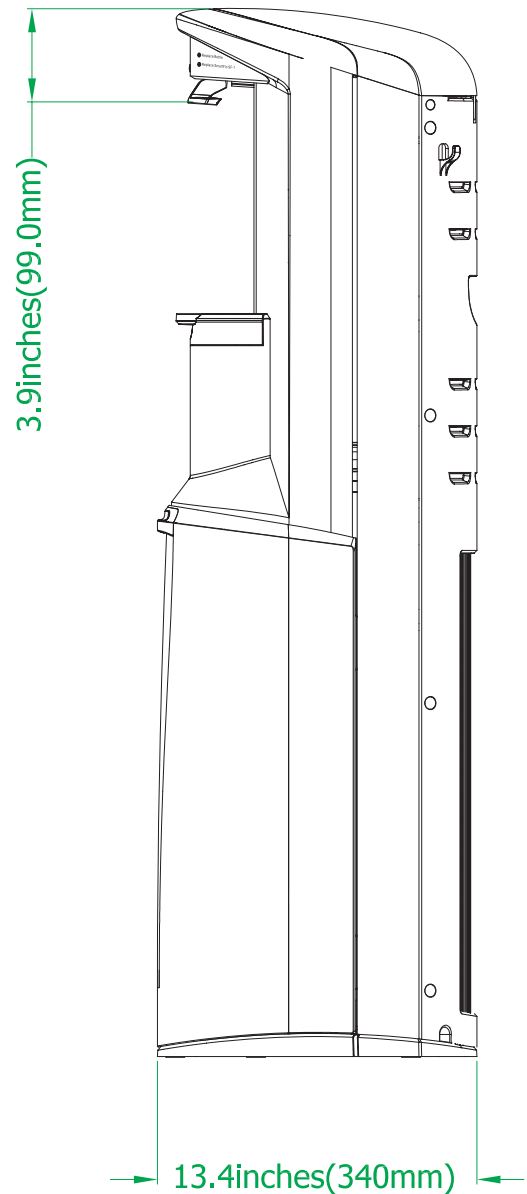


Product Dimensions

Storm (Bottom-Load)



Front



Side



Description of Product Model Number

ST

Cooler Shape

ST – Storm

F

Reservoir Type

F– SmartFlo SF-1 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

Option

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 12 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 12 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).

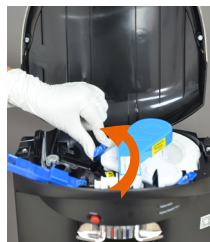


Figure 3-8

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).

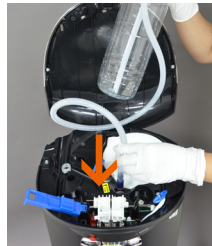


Figure 3-10

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

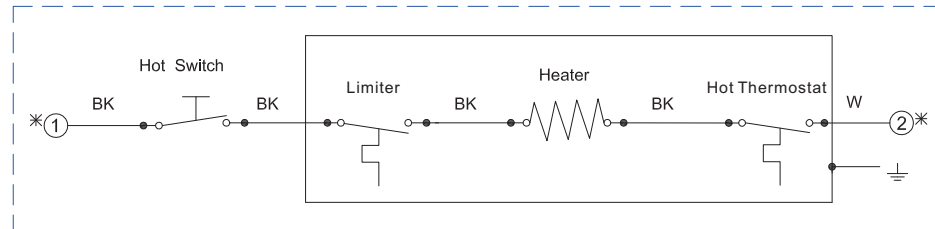
9. Place a container under faucet and dispense cold water until a smooth stream of water is dispensed (may take up to 1 minute).

SECTION 5 Electrical Component Diagnosis and Replacement

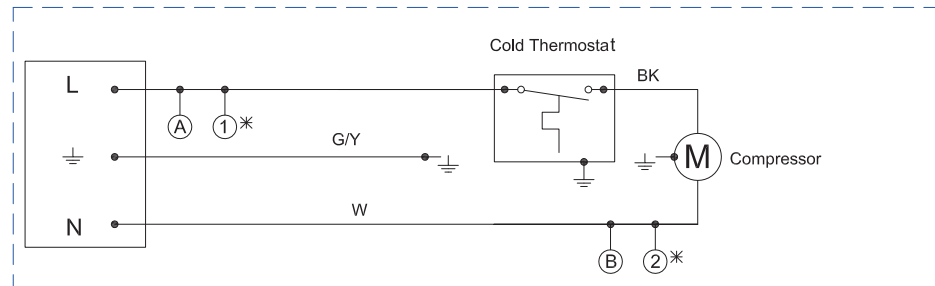
Wiring and Schematics

Models: Storm Hot & Cold water cooler

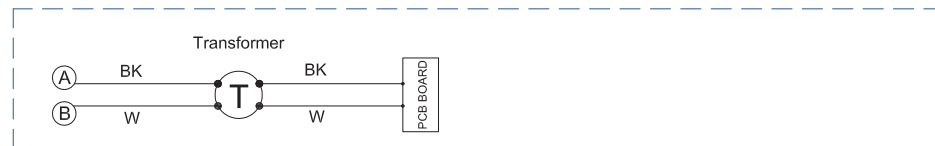
Hot Water System



Cold Water System

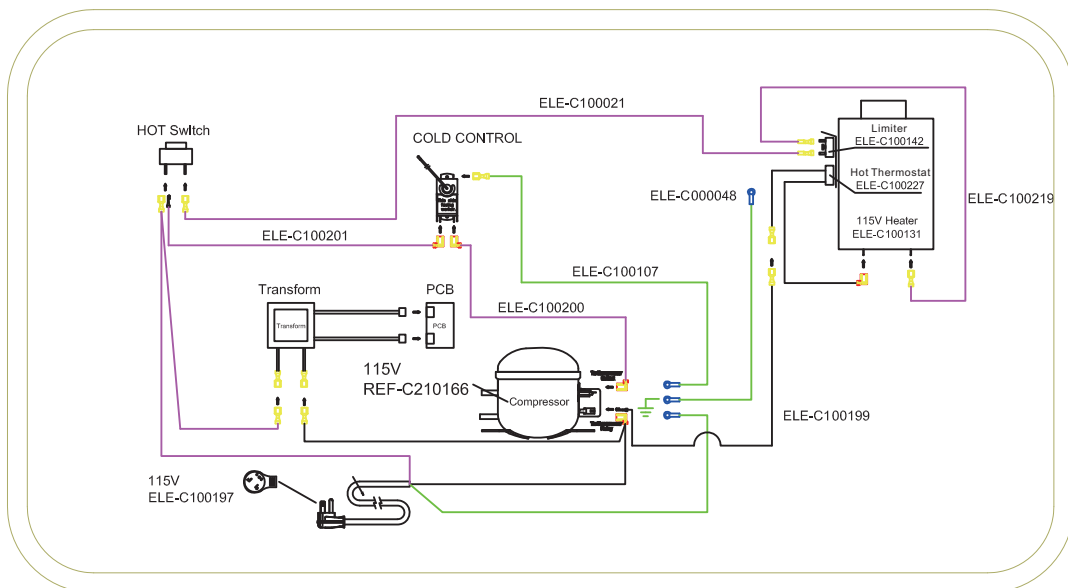


PCB System



● 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).

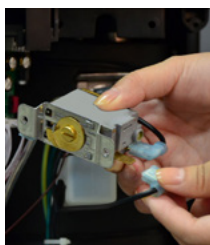


Figure 5-2-5

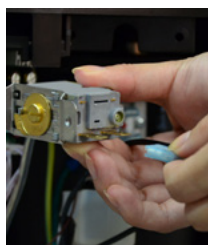


Figure 5-2-6

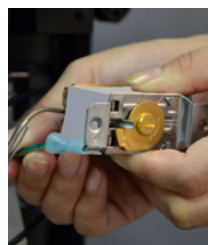


Figure 5-2-7

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.

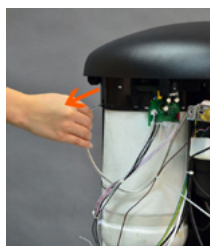


Figure 5-2-9

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.

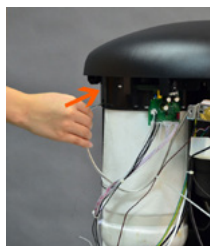


Figure 5-2-10

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).

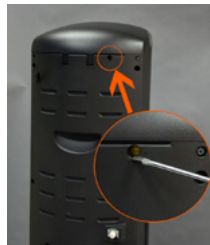


Figure 5-3-1

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 Cutout/Manual 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.

Tip: Use a plier or flathead screwdriver to pry wire connectors off (Figure 5-4-1 and Figure 5-4-2).

1. Remove the wire terminals from the thermostat and identify.



Figure 5-4-1



Figure 5-4-2

2. Remove the two screws. Remove the thermostat from its bracket (Figure 5-4-3).

(Note: For manual reset, remove the protect cover (Figure 5-4-4) from the old thermostat and install it to replacement thermostat.)



Figure 5-4-3



Figure 5-4-4

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

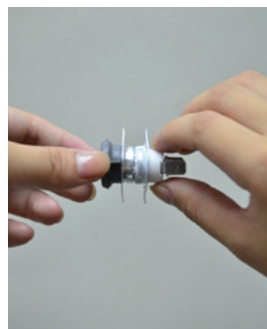


Figure 5-4-5

4. Reconnect the wires onto the thermostat as identified.

Note: If replacing the manual reset, ensure the reset button has been pushed prior to left panel installation.

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 the SmartFlo™ 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

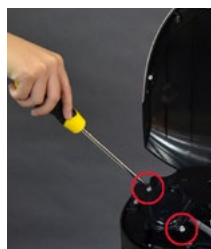


Figure 5-5-6



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

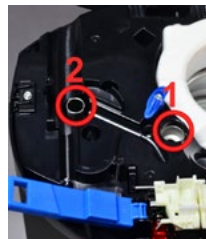


Figure 5-5-14

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 the SmartFlo™ 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 Figure 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

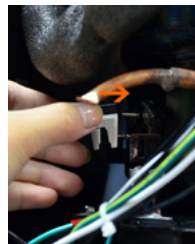


Figure 5-6-8



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

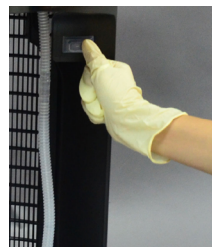


Figure 7-3

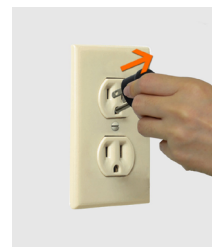


Figure 7-4

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

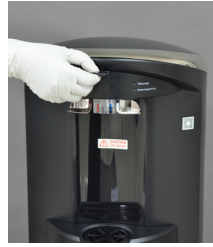


Figure 7-7



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 remove SmartFlo™ 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 7-16). Drain water into a pail or container (approx 0.5 gallon or 1.8 L) (Figure 7-17). Re-install red silicone plug and drain cap.



Figure 7-15



Figure 7-16

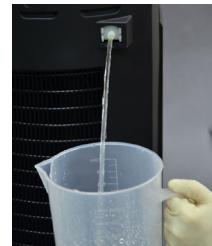


Figure 7-17

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 7-18 and Figure 7-19). 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 7-20). 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 7-18



Figure 7-19



Figure 7-20

9. Clean evaporator with a cloth (Figure 7-21).



Figure 7-21

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 7-22).

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



Figure 7-22

11. Lift door up to open properly. Brush, vacuum and wipe to clean the interior of condenser (Figure 7-23 and Figure 7-24), refer to chapter 9.



Figure 7-23



Figure 7-24

12. Reinstall or install a newSmartFlo™ Water Cartridge. Install the connector and corrugated tube into the inlet through cooler to bottom (Figure 7-25 and Figure 7-26). Insert the reservoir into evaporator (Figure 7-27). Ensure theSmartFlo™ Water Cartridge is installed properly. Turn the 2 knob to lock theSmartFlo™ Water Cartridge (Figure 7-28 and Figure 7-29). Close and latch the locking arm (Figure 7-30).



Figure 7-25



Figure 7-26



Figure 7-27



Figure 7-28



Figure 7-29



Figure 7-30

13. Install the hose connector to bottle adaptor (Figure 7-31). 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 7-32 and Figure 7-33).**



Figure 7-31

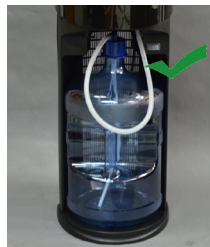


Figure 7-32



Figure 7-33

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 7-34).



Figure 7-34

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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Crystal Mountain Products Limited

North American Sales Office

200 Carnegie Drive, Suite 234
St. Albert, AB, T8N 5A7 Canada
Tel: 1 800 878 6422
Tel: 1 780 454 4545
E-mail: sales@crystalcoolers.com

European Sales Office

Fence House, Fence Avenue
Macclesfield, Cheshire
United Kingdom SK10 1LT
Tel: +44(0) 1625 439 111
Fax: +44 (0) 1625 502 527
E-mail: cmeurope@crystalcoolers.com

Crystal Mountain Products Inc.

US Office / Warehouse
1000 H Taylor Station Rd
Gahanna OH 43230
Tel: (614) 454 1618
Fax: (614) 866 7765
E-mail: sales@crystalcoolers.com

Crystal Mountain International Limited

Hong Kong Sales Office

Room 610, Winfield Commercial Building
6-8a Prat Avenue, Tsimshatsui
Kowloon, Hong Kong
Tel: (852) 2368 1989
Fax: (852) 3017 6727
E-mail: cmasia@crystalcoolers.com

Website: www.crystalcoolers.com

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