Service Manual
Storm Café

Crystal Mountain

Hot, Cold and Coffee Dispenser

Notes

Table of Contents

CAUTION: Optimum Operating Range 50°F-90°F (10°C-32°C)

Storm Café

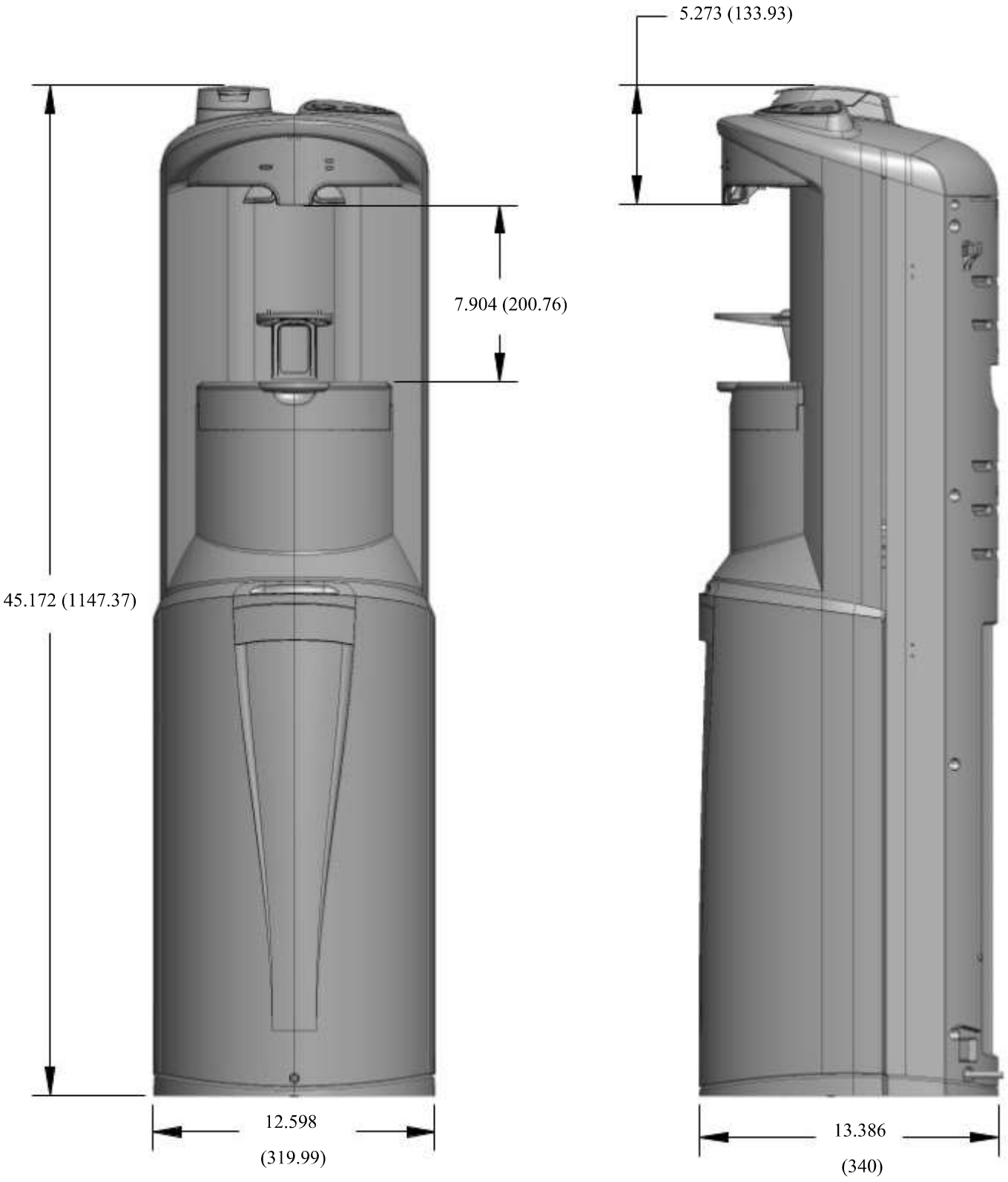
The Storm Café water dispenser with coffee brewer is the latest model in the Storm family of coolers. The Café combines the convenience of the original Storm bottom load cooler with a single serve coffee cup type brewer. This generation of the Storm has an upgraded fascia with lighting over each faucet handle.

Specifications

Power Rating		Single Phase
		100-115VAC 60Hz
Standard Current		8.9~9.5A
Power Consumption	Cold	70W
	Hot	1000W
Cold	Compressor	Single Phase Compressor
	Refrigerant Type	R134a (32g)
	Temperature Range	4-10°C(39.2-50°F)
Hot/Coffee	Heater	Internal Heater
	Temperature Range	73.9°C -85°C (165°F -185°F)
	Temp. Range for Coffee	91.5°C (196.7°F)
	Safety Device	Bimetal (Limiter115°C (239°F) OFF)
	Temperature Control	Bimetal 95°C (203°F)
	NTC Control	Electronic
Net Weight		15.1kg (33.1 lb.)
Loading Quantity		20’ Container: 204 Units
		40’ container: 420 Units

Dimensional Drawing

Dimensions are shown in Inches (mm)



Description of Product Model Number

AB	F	M	2	K	H	K	1	CF
Cooler Shape	Reservoir Type	Type of Lid	# of Faucets	Body Color	Temp. Option	Insert Color	Voltage	Option
AB= Storm Coffee Brewer	F= SmartFlo™ Water Cartridge	M= Manifold	2	K= Black	H= Hot & Cold	K= Black	1= 115V	CF= Café

The model and serial number can be found on the rear of the cooler.

See the example to right.

Aquabarista Parts Listing

Item	Description	Part Number
1	outlet tube connector	PLC-C150230
2	Cold Faucet Handle + Printing (Blue) - ST	SUB-C200829
2.2	Hot Faucet Handle + Printing (Red) - ST	SUB-C200445
3	Spring, SS, Faucet	FAS-C100104
4	Pin, Handle 76mm	FAS-C100199
5	Flow Meter	ELE-C100489
6	Tube, Silicone, Flow Meter	SIL-C150043
7	Connector, Water, Female	PLC-C150167
8	Valve, One Way	POU-C100100
9	Cover, Pump	PLC-C150174
10	Tube, Silicone, Air Pump	SIL-C150032
11	Pump, Air, DC12V	ELE-C100436
12	Upper Shelf Assembly	SUB-C200632 - H&C Top Shelf Assembly – ST Café for (6/8/10oz), with Green Main PCB SUB-C200981 - H&C Top Shelf Assembly – ST Café for (6/8/10oz), with Blue Main PCB SUB-C200982 - H&C Top Shelf Assembly – ST Café for (6/8/10oz), with Orange/Red Main PCB
13	Cold Control	REF-C100035
14	Motor, 12V DC, 1600 RPM	ELE-C100204
15	Bushing, Motor	PLC-C150052
16	Door Rail, Cap	PLC-C150033
17	Latch, SmartFlo, Cafe	PLC-C150166
18	Spring, SS, Safety Button	FAS-C100116
19	Safety Button, Red	PLC-C150126
20	PCB Switch Board	ELE-C100421
21	Top Cover Assembly	SUB-C200841 - Top Cover Assm - AquaBarista for (6/8/10oz) with Green UI PCBA SUB-C200625 - Top Cover Assm - ST Café for (6/8/10oz) with Green UI PCBA SUB-C200913 - Top Cover Assm - AquaBarista for (6/8/10oz) with Blue UI PCBA SUB-C200914 - Top Cover Assm - ST Café for (6/8/10oz) with Blue UI PCBA SUB-C200945 - Top Cover Assm - AquaBarista for (6/8/10oz) with orange/Red UI PCBA SUB-C200980 - Top Cover Assm - ST Café for (6/8/10oz) with Orange/Red UI PCBA
22	Pod Holder	PLC-C150162
23	Housing, Rear Café Assy	SUB-C200640
24	Housing, Front, Café Assy	SUB-C200642
25	Steam Valve, Café	SUB-C200634
26	Solenoid Valve	SUB-C200638
27	Base, Café Module Assy	SUB-C200639
28	Cover, Power PCBA	PLC-C150191
29	SmartFlo, Single Pack	SUB-C200724 H&C SFII, Single Package (Reg + Round bottle adaptor ASSY) Bubble Bag SUB-C200854 H&C SFII (+Spike bottle adaptor ASSY) - Bulk Pak
30	Hot Tank Assembly	SUB-C200628
31	NTC, White	ELE-C100457
32	NTC, Red	ELE-C100452
33	Limiter	ELE-C100459
34	Thermostat, Sealed	ELE-C100458
35	HT drain cover - 2 piece back panel	PLC-C150217
36	Plug, Drain, Yellow	SIL-C100154
37	Drain Cap	PLC-C100399
38	Drain Fitting	PLC-C120021
39	Spring Clip	FAS-C000029
40	Tube, Drain	SIL-C150002
41	Spring Clip	FAS-C000029
42	Adaptor, Rear Panel	PLC-C150198
43	Back Panel, Top Rear	PLC-C150195
44	Handle	PLC-C150197
45	Main PCBA	ELE-C100456 8/10/12 ounce green board ELE-C100535 6/8/10 ounce green board ELE-C100519 6/8/10 ounce blue board ELE-C100569 6/8/10 ounce orange/red board
46	PCBA, Power	ELE-C100440
47	Cover, Power PCB	PLC-C150188
48	Spring Block	PLC-C150028
49	Face Plate Assy	SUB-C200574 with gold color LED PCBA, which match with the old green Main PCBA and UI Board SUB-C200821 with Blue color LED PCBA, which match with blue/red Main PCBA and UI Board
50	Door Handle	PLC-C150015
51	Support, Raised Drip Tray	PLC-C150179
52	Drip Tray, Raised	PLC-C150180
53	Door Slider, Left	PLC-C150010
54	Cover, Drip Tray	PLC-C150012
55	Drip Tray	PLC-C150212
56	Door Assy	SUB-C200233
57	Door Slider, Right	PLC-C150009
58	Bottle Adaptor Assembly	SUB-C200412 Bottle Adaptor Assembly (Round) - ST spare part shipment SUB-C200235 Bottle Adaptor Assembly (Spike)- ST spare part shipment
59	Switch, Power, Hot Tank	ELE-C000010
60	Spring, SS, Door	FAS-C100109
61	Door Spring Holder	PLC-C150027
62	Door Rail	PLC-C150038
63	Panel, Front	PLC-C150004
64	Transformer, 100-240 VAC, 12VDC, 25W	ELE-C100415
65	Relay	REF-C100211
66	Overload	REF-C100167
67	Back Panel, Rear Lower	PLC-C150196
68	Low Bottle Indicator	PLC-C150041
69	PCB, Low Bottle Indicator	ELE-C100209
70	Spring, SS	FAS-C100108
71	Base Plate	PLC-C150204
72	Power Cord	ELE-C100451

Parts Not Shown:

Hinge Pin, SS OD 3mm x L85mm (top cover)	FAS-C100192
Catch, Top Cover	PLC-C150178
Hinge Cover	PLC-C150143
Seal, Steam Valve, Red	SIL-C100149
Tube, Steam Valve SS	FAS-C100203
Cup Dispenser, Storm	SUB-C200620

Storm Café Series PCBA's Explanation

ELE-C100535 Main PCBA, Green Board has been discontinued.

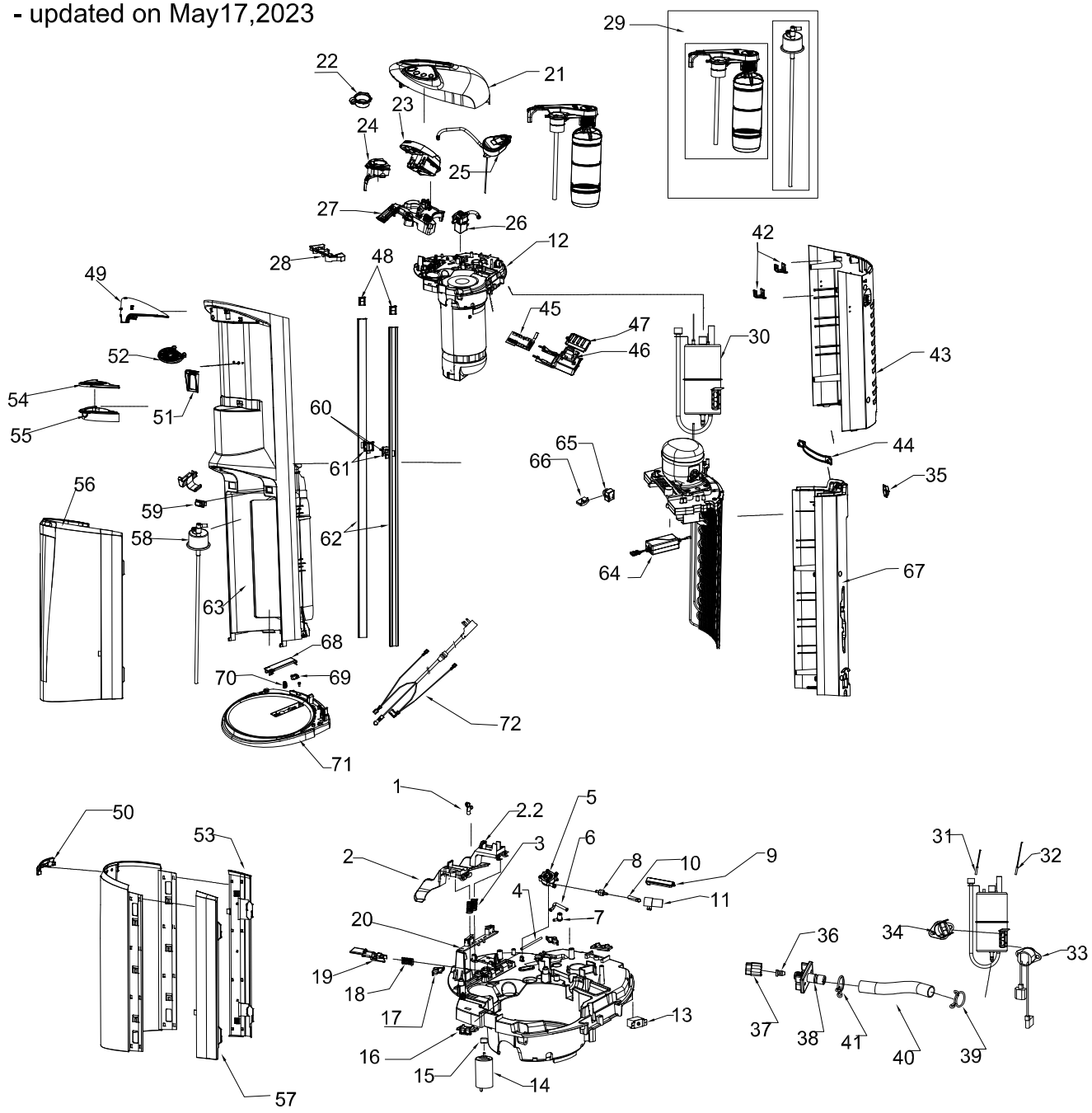
Boards must be replaced as a set by ordering either of these two combinations;

1. ELEC-C100519 Main PCBA, Blue Board
   SUB-C200913 Top Cover Assembly for Aqua Barista, Blue, 6,8,10 oz UI
   SUB-C200914 Top Cover Assembly for Storm Cafe, Blue, 6,8,10 oz UI
   SUB-C200821 Face Plate Assembly go with both blue or red light PCB
2. ELEC-C100569 Main PCBA, Red Board
   SUB-C200980 Top Cover Assembly for Storm Cafe, Red, 6,8,10 oz UI
   SUB-C200945 Top Cover Assembly for Aqua Barista, Red, 6,8,10 oz UI
   SUB-C200821 Face Plate Assembly go with both blue or red light PCB

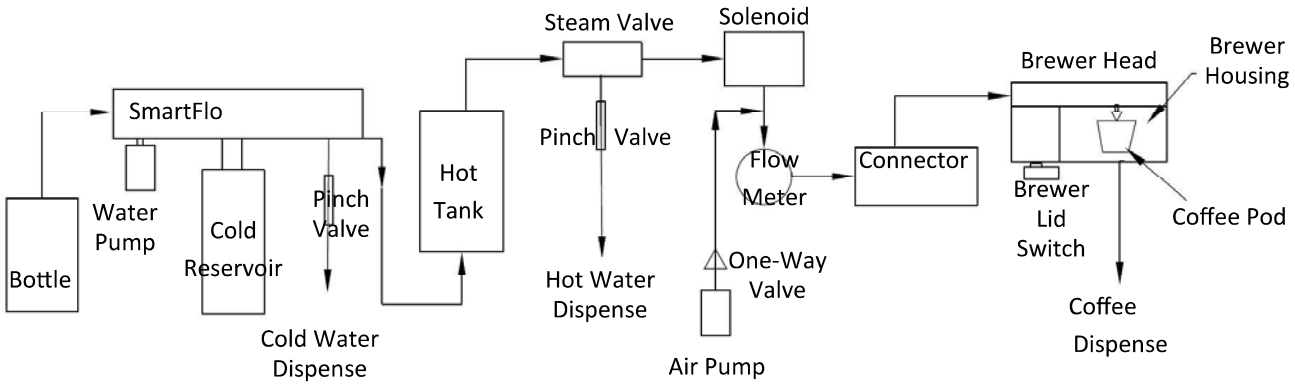
When ordering replacement PCBA's that are Blue or Red refer to part numbers listed above.

Exploded View

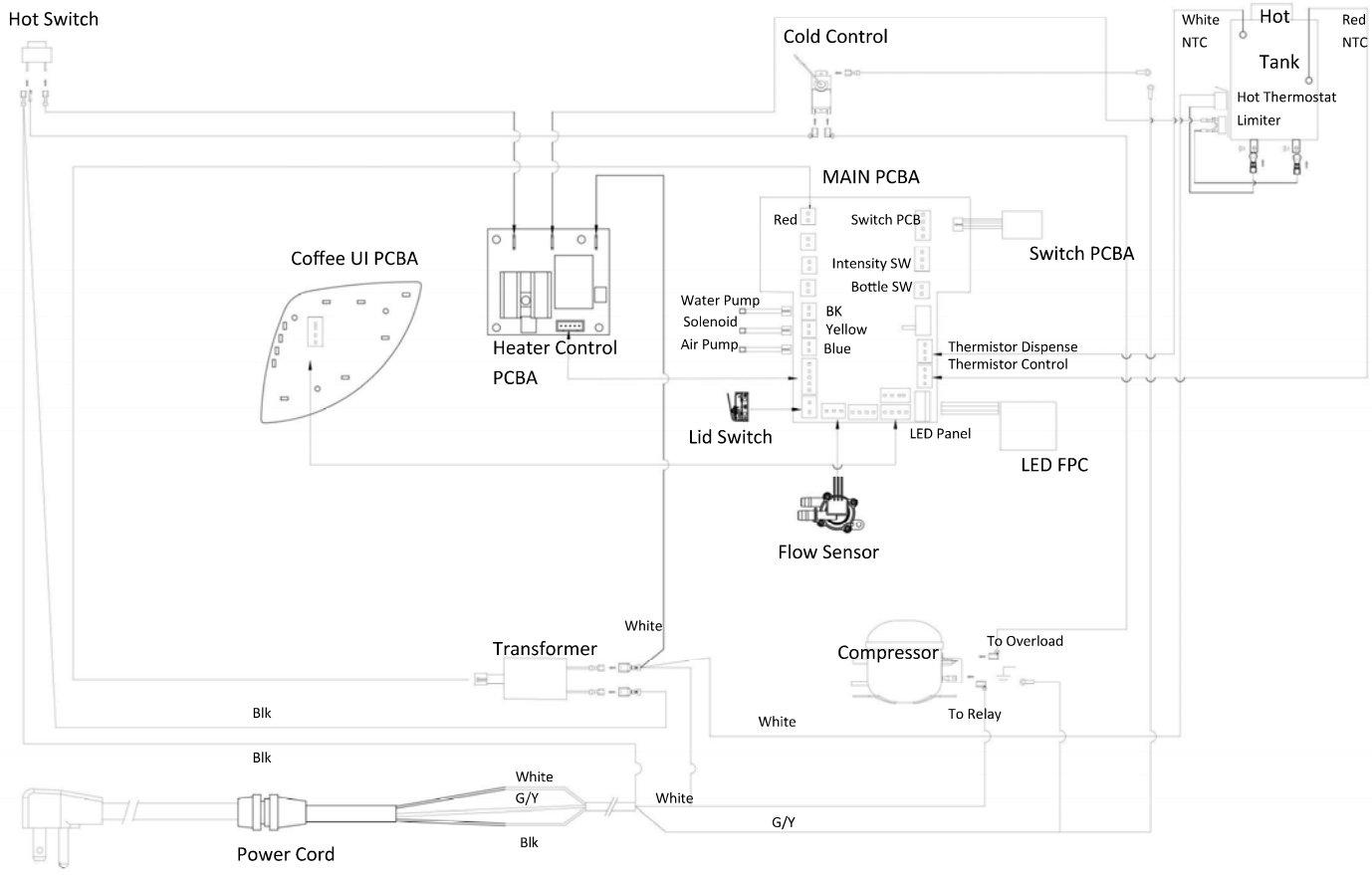
Storm Coffee Exploded View
- updated on May17,2023



Fluid Path Diagram



Electrical Diagram



Water Bottle Installation and Replacement

1. Open Dispenser door (Fig.1). Slide door upward to access bottle area.

Fig. 1

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

Fig. 2

4. Remove label/seal from the bottle cap (if applicable) and insert spike cap through the bottle cap (do not remove bottle cap) and press down to secure (Fig. 3 & 4).

Fig. 3

Fig. 4

5. Insert the bottle adapter assembly through spike cap until tube hits bottom of the bottle (Fig. 5 & 6).

Fig. 5

Fig. 6

6. Remove the red protective cap from the blue tube of the SmartFlo and install onto the bottle adapter assembly (Fig. 7).

Fig. 7

7. Slide bottle into cabinet (Fig. 8) and close the door. Push down to close.

Fig. 8

8. Depress the cold lever to fill the cold water tank (Fig. 9). When water begins to flow in a steady stream from the cold faucet, the tank has been filled (approximately 1 minute although it may be less time). Repeat the process with the hot lever until the flow out of the hot faucet is a steady stream. Lift the door to the bottle area and turn on the hot tank switch (Fig. 10) and close the door by lowering back into place.

Fig. 9

Fig. 10

Changing the Water Bottle

A blinking blue light above the cold water lever and a blinking “Replace Bottle” on the brew selection panel will alert you when your water bottle is getting low. Water may be dispensed normally until empty (no water flows from the water outlets when levers are depressed).

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 (Fig. 11). Slide door upward to access bottle area.

Fig. 11

2. Slide empty bottle out of cabinet (Fig. 12).

Fig. 12

3. Place a fresh bottle outside of the cabinet.
4. Clean the outside of new bottle with a cloth (Fig. 13). Remove the security label/seal from the bottle cap (if applicable).

Fig. 13

5. Remove bottle adaptor from the empty bottle (Fig.14) and remove the cap from the Hose Assembly (Fig.15).
Note: to maintain sanitization of the system, refrain from touching the section of the bottle adapter tube that is inserted into the bottle.

Fig. 14

Fig. 15

6. Install Spike Cap through the bottle cap (do not remove bottle cap) and press down to secure (Fig. 16 & 17)

Fig. 16

Fig. 17

7. Insert the Bottle adaptor assembly through Spike cap until tube hits bottom of the bottle (Fig. 18 & 19).

Fig. 18

Fig. 19

8. Slide bottle into cabinet and close the door (Fig. 20 to Fig. 22). Push door down to close.

Fig. 20

Fig. 21

Fig. 22

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

Replacing the SmartFlo™

Replacement of SmartFlo™ Water Cartridge

For the best tasting and highest quality water, it is recommended to change the SmartFlo™ Water Cartridge every 12 months. Follow the instructions that are provided with your replacement SmartFlo™ Water Cartridge, It is recommended to empty the bottle prior to replacement of the SmartFlo™ Water Cartridge and bottle adaptor. 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 of this after a period of 12 months of use. User may operate the cooler as normal until the bottle has been completely 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 (if your SF light does not re-set after following these steps, your model may require that the unit be power cycled for 10 seconds to complete the reset process).

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. Open Dispenser door (Fig. 1). Slide door upward to access bottle area. Turn off the hot tank power switch (Fig. 2) and unplug the water cooler (Fig. 3).

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)

Fig. 1

Fig. 2

Fig. 3

2. Take bottle out from the base. (Caution: don't break the corrugated tube.) Remove the connecter from adapter. Fig. 4).

Fig. 4

3. Place a glass or other container below the water outlets (to catch drips).

Fig. 5

4. Using the top cover key (Fig. 6), insert into the two holes (on the front, approximately 2 inches above and to the right of hot water safety button), push key inward to open top cover (Fig. 7 & 8).

Fig. 6

Fig. 7

Fig. 8

5. Squeeze the latch's end to open (Fig. 9 & 10). Turn counterclockwise to release the two blue knobs (Fig. 11 & 12). Pull to remove the SmartFlo™ Water Cartridge and discard in recycling bin (Fig. 13 & 14).

Fig. 9

Fig. 10

Fig.11

Fig. 12

Fig. 13

Fig. 14

6. Install a new SmartFlo™ Water Cartridge. Install the connector and corrugated tube into the inlet through cooler to bottom (Fig. 15 & 16). Insert the reservoir into evaporator (Fig. 17). Ensure the SmartFlo™ is installed properly. Turn the two blue knobs to lock into place (Fig. 18 & 19).

Fig. 15

Fig. 16

Fig. 17

Fig. 18

Fig. 19

7. Close and latch the locking arm (Fig. 20).

Fig. 20

8. Install the hose connecter to bottle adapter (Fig. 21). Put the water bottle into the bottom of the cooler.

Fig. 21

9. Close the top cover and lower the door to close. Plug the cooler into the electrical outlet. Pull the cold faucet lever until a steady stream of water comes out. Then, push the 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 (Fig. 22).

Fig. 22

10. Lift the door to open. Turn the hot tank power switch ON. Push downward to close the door.

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

Cold Control 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.

1. Turn off hot tank power switch (located on the front panel, inside the door) (Fig. 1) and unplug the water cooler.

Fig. 1

2. Remove the upper back panel from the water cooler.

3. Remove both mounting screws from the cold control. (Fig. 2 & 3).

Fig. 2

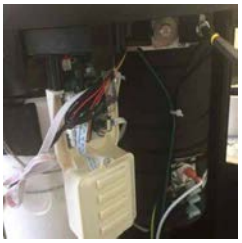


Fig. 3

4. Remove the cold control from the plastic shelf (Fig. 4).

Fig. 4

5. Remove the terminals from the thermostat, taking care to identify where each terminal is installed (Fig. 5 - 7).

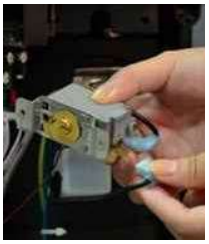


Fig. 5

Fig. 6

Fig. 7

6. Cut the small plastic zip tie holding the cold control sensor bulb to the evaporator insulation (Fig. 8).

Fig. 8

7. Pull the sensor tube out from the evaporator insulation to remove (Fig. 9). Note: If required, install the Sensor tube cover onto the replacement cold control.

Fig. 9

8. Install the replacement cold control into the evaporator insulation until it bottoms out—approximately 5 inches (Fig. 10). Note: Care should be taken while installing the sensor tube that the protective cover within the evaporator insulation is in the proper position.

Fig. 10

8. Install a replacement zip tie to hold the sensor within the evaporator insulation.
9. Reinstall the wire terminals onto the cold control taking care to place in original position.
10. Install the cold control to the plastic shelf, re-using the original screws.
11. Reinstall the upper back panel.
12. Re-connect the cooler to the power supply. Note: Ensure proper thermostat setting (see section for Cold Control Adjustment).

Cold Control Adjustment

Note:

The Cold Control can be adjusted without the removal of any panel. The adjustment screw is on the top rear (when viewed from the rear, see Fig. 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 counterclockwise direction approximately 1 hour position. Allow the cooler to stabilize for 2-3 hours to ensure the proper temperature of the cold water.

Fig. 1

Thermostat and/or Limiter 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 upper back panel removed.

Tip: Use a plier or flathead screwdriver to pry wire connecters off (Fig. 1).

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

Fig. 1

2. Remove the two screws. Remove the thermostat (or limiter) from its bracket (Fig. 2).

Fig. 2

3. There is enough heat transfer paste on the tank and old control to simply wipe the bottom of the new control against the old one (Fig. 3). Place into position and evenly tighten the two screws.

Fig. 3

4. Reconnect the wires onto the thermostat (or limiter) as identified.

Hot Tank 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 the access key to open the top cover. Release and open the latch (Fig. 1). Turn the two blue locking tabs (Fig. 2 & 3). Pull the SmartFlo™ up approximately 4-6 inches (Fig. 4).


Fig. 1


Fig. 2


Fig. 3


Fig. 4

2. Turn the red locking clips and lift away the coffee pod holder (Fig. 5). Undo the two locking latches and lift off the pod holder base (Fig. 6). Remove the three screws holding the coffee module base. Lift up and gently move out of the way (Fig. 7 & 8).


Fig. 5


Fig. 6


Fig. 7


Fig. 8

3. Remove the screw that secures the steam valve (Fig. 9). Remove the steam valve to access the three hot tank screws. (Fig. 10 & 11). Do not remove these screws, yet.


Fig. 9

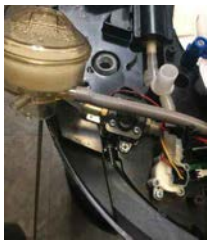


Fig. 10


Fig. 11

4. Remove the wires connected to the thermostat and limiter (Fig. 13). Remove the ground wire from the hot tank. Locate the two terminals at the bottom of hot tank and disconnect the wires from the Hot Tank Element. Disconnect the NTC sensor wires (coming from top of hot tank) from the circuit board (Fig. 14).
   Note: The wires may be difficult to remove from the spade connectors.

Fig. 13

Fig. 14

5. While holding the hot tank with one hand, remove the 3 screws from the top shelf (Fig. 15).

Fig. 15

6. Remove the hot tank from cooler (Fig. 16).

Fig. 16

7. While holding the new hot tank with one hand, align both tubes with the corresponding holes (Fig. 17 and 18). Tighten the three screws to attach the hot tank properly.

Fig. 17

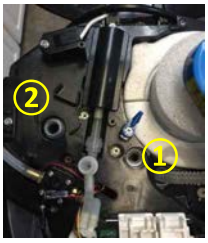


Fig. 18

8. Reconnect all wires as identified, if necessary, refer to the wiring diagram. Reinstall, the coffee module base, the steam valve, pod holder base and the pod holder (Make sure that the silicone seal is installed correctly on the steam valve). Reinstall the SmartFlo™ and turn the blue locking clips in place to secure. Close and latch the locking arm. Close the top of the cooler and re-install the upper rear panel.

9. Plug the cooler back into power outlet. Push hot safety button and press the hot water faucet lever until water comes out (Fig. 19). CAUTION: To prevent damaging the hot tank, do not turn **ON** if the hot tank is empty.

Fig. 19

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

Overload and/or Relay 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 (Fig. 1 & 2).

Fig. 1

Fig. 2

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

Fig. 3

Fig. 4

Fig. 5

Fig. 6

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

Fig. 7

Fig. 8

Fig. 9

Fig. 10

Fig. 11

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

Fig. 12

Fig. 13

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 are 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 nitrile gloves or wash hands before and after handling water contact parts.
2. Remove drip tray assembly and set aside for cleaning (Fig. 1).

Fig. 1

3. Lift door up (Fig. 2), turn off the hot tank power switch (Fig. 3) and unplug the water cooler (Fig. 4).

Fig. 2

Fig. 3

Fig. 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).

4. Take bottle out from the base. (Caution: don't break the corrugated tube.) Remove the connecter from adapter (Fig. 5).

Fig. 5

5. Using the top cover key (Fig. 6), insert into the two holes (on the front, approximately 2 inches above and to the right of hot water safety button). Push key inward to open top cover (Fig. 7 and 8).


Fig. 6


Fig. 7


Fig. 8

6. Squeeze the latch's end to open (Fig. 9 & 10). Turn counterclockwise to release the 2 knobs (Fig. 11 & 12). Pull to remove the SmartFlo™ Water Cartridge and discard in recycling bin (Fig. 13 & 14).


Fig. 9


Fig. 10


Fig. 11


Fig. 12


Fig. 13


Fig. 14

7. With the cooler top still open, open the coffee pod holder (Fig. 15). Remove the coffee cup holder (brown) (Fig. 16) and discard or machine wash (top rack only). Turn the red twist locks on each side to release the coffee pod holder. Lift out and discard or machine wash (top rack only) (Fig. 17, 18, 19).


Fig. 15


Fig. 16


Fig. 17


Fig. 18


Fig. 19

8. To drain the hot tank, use a phillips screwdriver, unscrew drain plug and remove at the rear of the cooler (Fig. 20 & 21). Drain water into a pail or container (at least 0.5 gal.) (Fig. 22). Re-install drain plug and screw in securely.


Fig. 20


Fig. 21


Fig. 22

9. It is recommended that the hot tank be descaled periodically (depending upon water quality and usage). Only the use of food-safe descaling agents, compatible with 304 grade stainless steel, is 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 is securely in place (Fig. 23 & 24). Using a funnel, add the descaling solution to the hot tank, filling up to the top of the inlet (approx. 38.7oz/1100ml) (refer to Fig. 25). Allow time for the solut ion to descale. Drain and dispose of solution according to the manufacturer's instructions (refer to step 8 for draining the hot tank).

Fig. 23

Fig. 24

Fig. 25

10. Wipe evaporator with a clean cloth (Fig. 26)

Fig. 26

11. Use a stiff, ***non-metallic*** brush or vacuum attachment to clean the condenser and all accessible areas to remove dirt, lint and debris. Use a damp cloth to wipe down condenser (Fig. 27).

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

Fig. 27

12. Lift door up to open. Brush, vacuum and wipe to clean the interior of condenser (Fig. 28 & 29).

Fig. 28

Fig. 29

13. Install a new SmartFlo™ Water Cartridge. Install the connector and corrugated tube into the inlet through cooler to bottom (Fig. 30 & 31). Insert the reservoir into evaporator (Fig. 32). Ensure the SmartFlo™ is installed properly. Turn the two knobs to lock the SmartFlo™ in place (Fig. 33 & 34).


Fig. 30


Fig. 31


Fig. 32


Fig. 33


Fig. 34

14. Slide a clean pod holder onto the tabs on the side of the probe assembly and push downward into place (Fig. 35). Turn the two red twist locks to lock into place (Fig. 36). Place a clean cup holder (brown) in the pod holder (Fig. 37) and push down to close the pod holder lid (Fig. 38).


Fig. 35


Fig. 36


Fig. 37


Fig. 38

15. Close and lock the latch arm (Fig. 39).


Fig. 39

16. Install the hose connecter to adapter (Fig. 40). Put the water bottle into the bottom of the cooler.

Fig. 40

17. Close the top cover and lower the door to close. Clean the drip tray assembly and install it back onto cooler. Plug the cooler into the electrical outlet. Push the 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 (Fig. 41).

Fig. 41

18. Lift the door to open. Turn the hot tank power switch ON. Push downward to close the door.

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

Monthly Cleaning With Detergent Pod (Not Supplied)

1. With the coffee machine turned on and at temperature, open the coffee pod holder (Fig. 18), insert the detergent pod and close the lid (Fig. 19).

Fig. 18

Fig. 19

2. Place a glass or similar container under the water outlet (Fig 20). Select the twelve cup option and press the “Brew” button to start the cleaning cycle (Fig 21).

Fig. 20

Fig. 21

2. Upon completion of the cleaning cycle, clean the coffee pod holder using the “Daily Cleaning” procedures in this document.

3. Once the cleaned coffee pod holder is installed, press the 8, 10, or 12 oz option and press the “Brew” button to flush hot water through the unit without inserting a coffee pod into the pod holder. Repeat five times or until no detergent residue is detected.

Note: The detergent pod is a special cleaning agent used specifically for cleaning coffee pod-type machines. A food grade detergent must be used.

Cleaning the Inlet or Outlet Needle

1. Locate a metal paper clip and bend it so that there is a long straight section (Fig. 1).

Fig. 1

2. To clean the inlet needle, open the cooler top. Open the pod holder lid and remove the brown cup holder. Locate and turn both red twist locks (Fig. 2) to release the pod holder assembly (Fig 3) and set aside. Snap open the catches on either side of the Rear Housing (Fig. 4) and lift out the component.

Fig. 2

Fig. 3

Fig. 4

3. While holding the Rear Housing in one hand, turn it so that the bottom of the lid can be seen easily (Fig. 76). Locate the inlet needle in the lid's center. Using a straightened paper clip, locate and gently insert it into all of the openings, spinning and rocking to loosen any grounds clinging to the needle (Fig. 5).

Fig. 5

4. To clean the outlet needle, open the cooler top. Open the coffee pod holder assembly (Fig. 6) and remove the brown pod holder (Fig. 7) and set aside. Turn the red twist locks on each side to release the coffee pod holder assembly. Lift out and set aside (Fig. 8).

Fig. 6

Fig. 7

Fig. 8

5. While holding the pod holder assembly in one hand, locate the opening in the exit needle (Fig. 9) and insert the straightened paper clip into the hole and gently spin or rock the paperclip to remove any grounds which might be sticking to the needle (Fig 9).

6. Reassemble the Rear Housing and the Pod Holder Assembly into the brewer module and close the lid.

Fig. 9

7. Place a 12 oz or larger container on the cup holder and run a cycle through the machine without inserting a coffee pod into the pod holder. This will help to flush the loosened coffee grounds from the system. Repeat as necessary.

Displaying and Clearing the Fault Codes

To Display the Fault Code

Fig. 1

1. Turn off the Hot Tank Power Switch (Fig. 1)

2. If unit has 8, 10 & 12 oz options: Press and hold the “8 ounce” and “10 ounce” buttons for five seconds (Fig. 2 & 3). If unit has 6, 8, 10 oz options: Press and hold the “6 ounce” and “8 ounce” buttons for five seconds (Fig. 2 & 3).

Fig. 2

Fig. 3

3. The “Select Cup Size” LED will flash and the unit will make a short beep.
    1. If no faults, the LED will flash once.
    2. If a problem with the NTC control board, two flashes.
    3. If a problem with the NTC display board, three flashes.
    4. If a coffee system problem (flow meter, solenoid, tubing, etc.), four flashes.
    5. If a problem with heating system, five flashes.
    6. If a problem with the air pump, six flashes.

To Clear the Fault Code.

1. If unit has 8, 10, 12 oz options: Press and hold the “Brew” button and the “10 ounce” button (Fig. 4 & 5). If unit has 6, 8, 10 oz options: Press and hold the “Brew” button and the “8 ounce” button (Fig. 4 & 5).

Fig. 4

Fig. 5

2. The unit will make a long beep. The “Select Cup Size” button will not flash.
3. The Fault Code is cleared.

Purging the Brew Head of Water (if equipped)

1. Turn off the Hot Tank Power Switch (Fig. 1), but leave the unit plugged into the electrical outlet.

Fig. 1

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).

2. To drain the hot tank, use a #2 Phillips screwdriver, remove the drain cap cover on the rear of the cooler. Using a flat blade screw driver or 1/2" socket, remove the drain cap and plug (Fig. 2 & 3). Drain water into a pail or container (at least 0.5 gal.) (Fig. 4) and discard. Once the hot tank is drained completely, leave the plug, cap and cover off. They will be re-attached later in the process.

Fig. 2

Fig. 3

Fig. 4

3. If not already closed, ensure that the coffee pod holder lid is closed. Place containers under the coffee nozzle and the Hot tank drain on the rear of the machine.
4. For 8, 10, 12 oz selection size, press and hold both the "10 ounce" and "12 ounce" buttons for five seconds (Fig. 5 & 6).

   For 6, 8, 10 oz selection size, press and hold both the "8 ounce" and "10 ounce" buttons for five seconds (Fig. 5 & 6).

   The unit will begin blowing air for 60 seconds to purge the hot water tank and brewing system of water. When finished, the unit will return to the normal "steady" state. Empty the containers of the water that was purged.

Fig.

Fig. 6

5. Unplug the power cord from the electrical outlet and hang on the cord hook on the top left rear of the unit.
6. Replace drain plug and cap, attach drain cover.
7. The unit is now ready for transport or storage.

Troubleshooting

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), replace the water bottle.

If water leaking from above the bottle (or not bottle related), unplug Dispenser, remove bottle and contact your water delivery service or Crystal Mountain.

Ensure that the drip tray is not full and overflowing.

Water Not Dispensing

Ensure Hot/Cold tanks have been primed (see section for Priming the 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 temperature will be reached after several hours of operation.

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

No Hot Water

Optimum hot water temperatures will be reached after 15-20 minutes.

Ensure that the Hot Water Switch (located on hte right hand side of the bottle compartment) is turned on.

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.

Ensure that the SmartFlo™ is installed properly. Gently lift up about 1-2 inches and re-install.

Brewer only makes a Partial Cup or Brew Volumes Vary

The exit needle may be clogged. Follow the instructions for Cleaning the Inlet/Outlet Needle. Slight variations in brew volume may occur due to variations in temperature, pod type, manufacturing processes, etc.

Grounds in Coffee

The Inlet and/or Outlet Needles may have coffee grounds accumulated in/on them. Follow instructions for Cleaning the Inlet/Outlet Needle.

Crystal Mountain Products Inc
1000H Taylor Station Rd
Gahanna OH 43230

Manufactured under U.S. Patent No. 10,781,093 and other patents pending
Form 2007001 Rev 05.23