

FETCO® User's Guide and Operator Instructions

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FETCO Automatic Combination Coffee Brewer with Pour-Over Feature



FETCO CBS-2121 Auto-Combi with carafe warmers



FETCO CBS-2121 Auto-Combi for thermal servers

Contact Information

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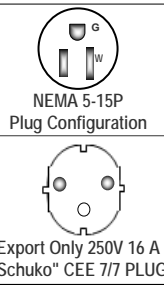
Model: CBS-2121. Specifications for automatic coffee brewer with pour-over feature and hot water service

Description and Features:

Automatic fill coffee brewer-with pour-over and hot water service designed for 64 fl.oz./1.8 L carafes.
Hot water service available in Automatic Mode-disabled in Manual Mode and during brewing

Electrical configuration

Configuration Code	Warmer Positions	Voltage	kW	Amps	Electrical Connection
C212103	None	100-120 Volts	1.11 – 1.60	11.1 – 13.3	NEMA 5-15P plug
C212113	Two	100-120 Volts	1.11 – 1.60	11.1 – 13.3	NEMA 5-15P plug
C212104	None	230	2.02	8.6	CEE7/7 Schuko
C212114	Two	230	2.02	8.6	CEE7/7 Schuko

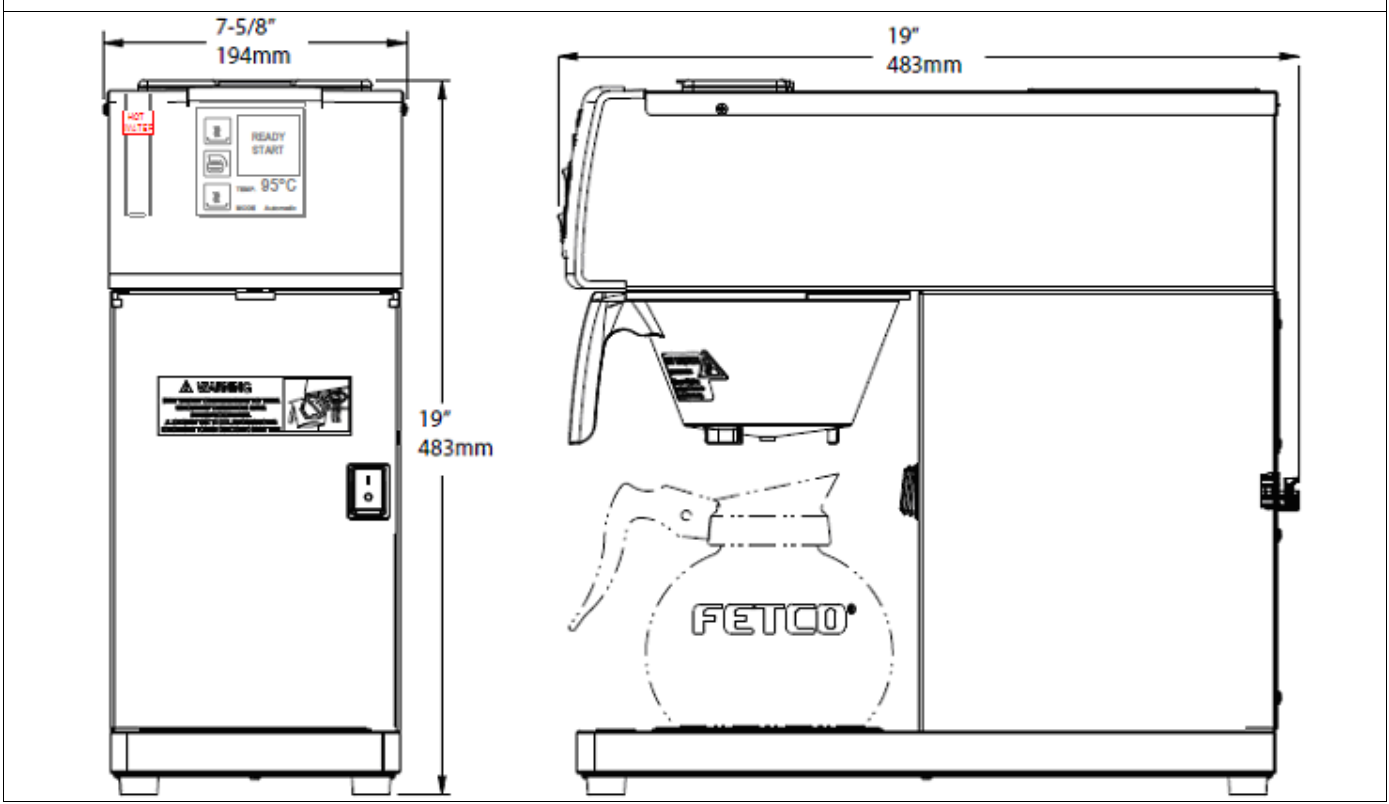


For 64 fl.oz./1.8 L Automatic: Allow approximately five minutes total brew time with final drip out
In Manual Mode: Allow approximately four minutes pour-in time with brew & one minute drip time

Weights and Capacities

Dispenser Model	Height	Width	Depth	Water tank capacity	Empty Weight	Filled Weight	Shipping Weight	Shipping Dimensions
C212113	19 in 483mm	7 5/8 in 194 mm	19 in 470 mm	1.4 gallon 5.2 L	17 lbs 7.7 kg	28.4 lbs 12.9 kg	23 lbs 10.4 kg	20 ³ / ₄ " X 10 ³ / ₄ " X 12 ¹ / ₄ " 524mmX273X540mm

Calibrated for 64 fl.oz./1.8 L carafe	Calibrated for 105g coffee dose Range: 100-115gram 3.5-4 ounce throw	Coffee Filter FETCO # F003 or 9 ³ / ₄ " X 4 ¹ / ₂ "
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STARTUP AND PREPARATION FOR FIRST BREW

Remove any protective vinyl film, if present, from the stainless steel enclosure. The protective film pulls off.

- Place coffee brewer on a solid, level counter top, near water utility and an electrical outlet.
- Full brewer and dispensers weighs 28.4 pounds
- Level the brewer: Use a bubble level and check side-to-side and also front-to-back
- Attach brewer to water supply line. NOTE: Use a shut off before the water filter, and purge the line before connecting.
- Verify that water flow is at least ½ gallon per minute & water pressure is 20 and 75 psig before connecting.

Brewer set to “AUTOMATIC” Mode:

Brewer is shipped in Manual Mode and must be switched into AUTOMATIC Mode through programming

If you switch to AUTO Mode: Brewer will automatically fill and begin to heat when hot water tank is filled.

For brewer in “MANUAL” Mode (Default). Brewer is set by default to MANUAL Mode when shipped from factory.


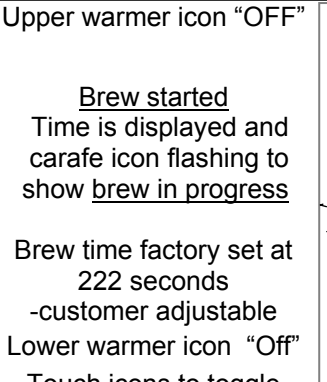

1. Place an empty glass decanter on the lower warmer deck, under the brew basket.
2. Insert the empty brew basket into the brew rails of the brewer.
3. Slowly manually fill the tank with room temperature water through the opening on the top cover until water starts running in a steady stream from the brew basket (3 pots or 192 fl.oz.).
 - The slight overflow indicates that the tank is full and is primed for brewing.
5. Allow the brewer to heat up to full temperature, indicated by the “READY” icon on front panel.
 - Slight dripping from the brew basket is normal as water expands when heated.
 - Keep an empty carafe under the brew head to collect any possible drips.
 - Heat up may take up to 30 minutes for the first time the coffee brewer is plugged in.

-WHEN THE “READY” ICON DISPLAYS.

6. Insert the empty brew basket into the brew rails of the brewer.
7. Place an empty decanter on the lower warmer deck, under the brew basket.
8. Press “START” [If CBS-2121-A is attached to water supply and in “AUTOMATIC” mode.]
OR in MANUAL MODE pour one additional carafe of fresh water to prime the hot water tank
9. When “READY” light comes back on-the CBS-2121-A is ready to brew

COFFEE BREWING:

1. Insert a filter into the brew basket
 2. Pour fresh ground coffee into the filter-distributing it evenly.
 - Start with using 1-4 ounces of ground coffee, for a full brew.
 - (3.5-4.0 ounces regular ground coffee was used for factory calibration)
 3. Slide the brew basket completely into the upper rails.
 4. Place an empty dispenser beneath the prepared brew basket prior to brewing.
 5. Brewer is prepared to brew when “READY” icon displays
 6. AUTOMATIC FILL: Press “START”
OR MANUAL FILL: Pour one container or carafe of fresh water into the screened area on top of the brewer.
 - (Container is the measure of a standard serving carafe = 64 fl.oz/1.9L)
 7. After brewing is finished: dispose of the used filter and grounds and rinse the brew basket
- 222 second AUTOMATIC brew time is 3:42 minutes (This includes default 1:27 brew and 2:15 drip out).
Typical MANUAL brew time approximately five minutes—4 minutes pour-in time & brew with 1 minute drip time

BREWER “READY” (to Left)	BREW STARTED (to Right)	Display screens shown for brewer in automatic mode
 <p>Upper warmer icon “ON” “READY” to brew icon “START” icon in box Full/Half batch “FULL” Hot water tank temp. (degrees Celsius) -customer adjustable Lower warmer icon ON” Automatic/Manual mode</p>	 <p>Upper warmer icon “OFF” Brew started Time is displayed and carafe icon flashing to show <u>brew in progress</u> Brew time factory set at 222 seconds -customer adjustable Lower warmer icon “Off” Touch icons to toggle</p>	 <p>STOP TIME. 222 MODE Automatic</p>

INFORMATION SCREENS AND USER SETTINGS

The CBS-2121-A displays the settings & operation conditions of the brewer and is also a touch screen to allow the user to adjust and change the brewer settings. Touching the icon on the screen toggles the setting on/off.

MAIN ACCESS (INPUT BOX on upper right side of screen)

FILLING: The CBS-2121-A is manually filled before putting it into service. In AUTOMATIC mode, the hot water tank fill system will display when the tank level probe activates the fill valve.

“HEATING”-Two heating conditions are displayed:

“HEATING”-start is enabled (temp above 91°C/195°F). “READY-START” box is displayed

“HEATING”-start is not enabled (temp below 91°C/195°F). No “READY-START” box: heater is on and heating

BREWER SETTING INFORMATION (lower right side of screen)

TEMPERATURE: The hot water tank temperature displays in user selectable Fahrenheit or Celsius units.

FILL MODE: Shows Automatic or Manual Fill (water inlet valve disabled).

Automatic-attached to water supply for self fill and brew. Brew is timed and selectable for full or half batch.

ACCESSORIES (left side of the screen)

UPPER & LOWER WARMERS. Touch icon to turn warmer on/off

FULL & HALF BATCH BREW: Touch icon to toggle from full to half batch brew volume in “AUTO” Mode

HOT WATER SERVICE BUTTON-Enabled in “AUTO” Mode with “READY” displayed

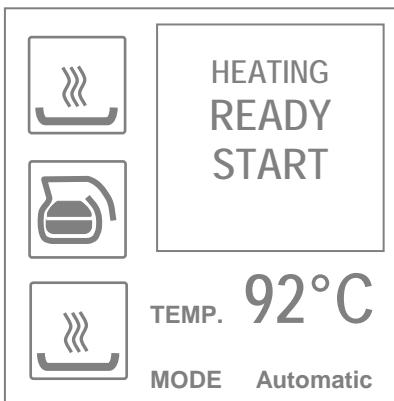
Hot Water service disabled during BREW, and while filling and heating, and fully disabled in MANUAL Mode

EXAMPLES OF SCREENS FOR THIS EQUIPMENT.

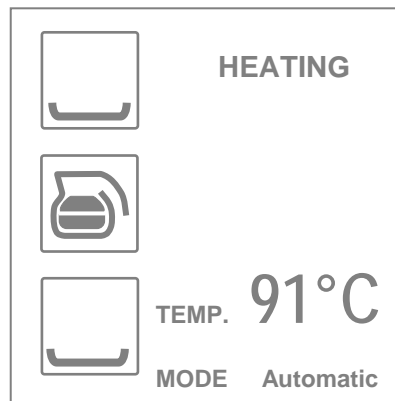
For brewer information and to access brewer START/STOP and brewer adjustments (in PROGRAMMING mode)



Brewer is ON-set for FULL batch
Brewer is filling
Tank temperature low (<95°C)
WARMERS: Upper-Off/Lower-ON



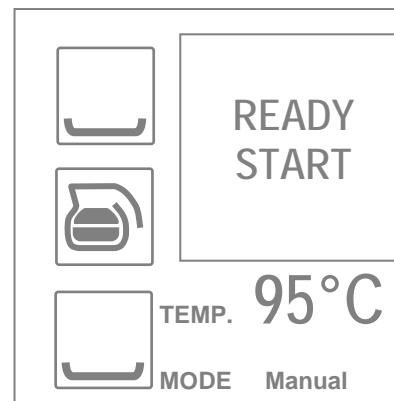
Brewer is ON-set for FULL batch
Filling is complete
Tank temperature low (<95°C)
WARMERS: Upper-ON/Lower-ON



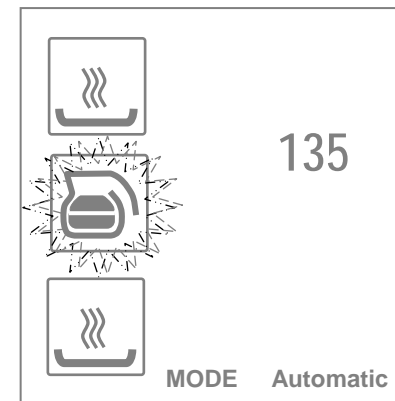
Brewer is ON-set for FULL batch
START icon disabled (temp-low)
WARMERS: Upper-Off/Lower-Off



Brewer is ON-set for HALF batch
Brewer in AUTOMATIC mode
READY START icon displayed
WARMERS: Upper-ON/Lower-ON



Brewer is ON-set for FULL batch
Brewer in MANUAL mode
Brewer is ready for filling
WARMERS: Upper-Off/Lower-Off



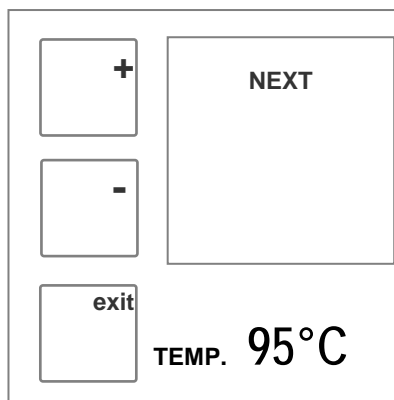
Brewer completed FULL batch brew
Drip out time is pre set to 135 sec.
In drip out mode because the brewer icon is flashing and the STOP icon has disappeared

ADJUSTING THE BREWER: VOLUME TEMPERATURE AND UNITS

the CBS-2121-A Combi uses easy & intuitive touch screens to access and adjust brewer internal settings.
Brew start, heaters, fill and hot water valve are disabled in PROGRAMMING mode

TO ENTER PROGRAMMING

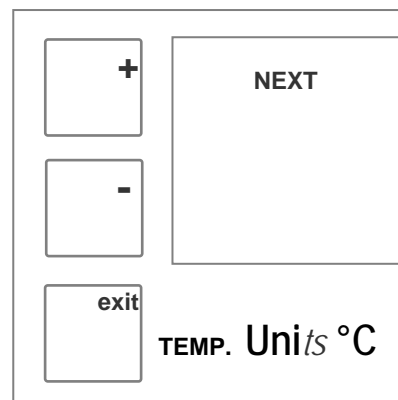
- TURN POWER SWITCH TO "OFF"
- TURN POWER SWITCH "ON"
- IMMEDIATELY--
- Touch INPUT BOX on touch screen



FIRST SCREEN

Set hot water tank temperature.
Touch the + or – box to raise or lower tank temperature
-Default is 95°C
-Range is 82-97°C

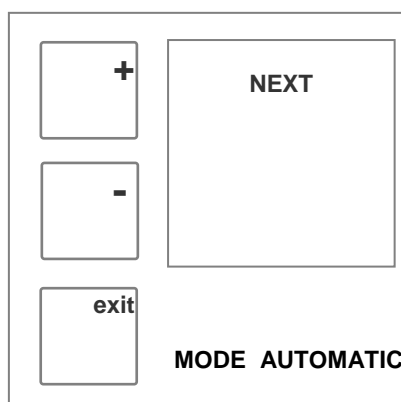
Press NEXT to go to second programming screen-OR-press exit to save settings & leave



SECOND SCREEN

Tank temperature units.
Touch the + or – box to toggle from degrees Celsius or Fahrenheit

Press NEXT to go to third programming screen-OR-press exit to save settings & leave



THIRD SCREEN

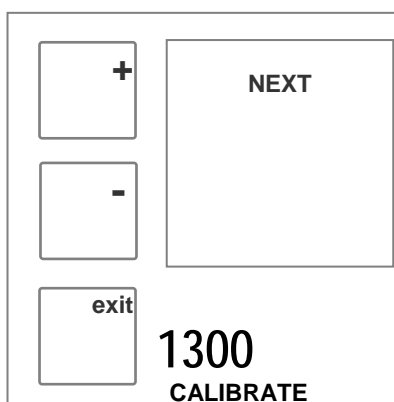
Manual/Automatic fill mode

AUTOMATIC MODE

-the brewer is attached to water supply for self fill and brew.
Brews are timed and selectable for full or half batch.
The 222 second START timer is set for 1:27 minute brew and 2:15 minute drip out

MANUAL FILL MODE

Water inlet valve disabled.
Do not press "START" Icon" if brewer is in MANUAL Mode
This is to use the optional Pour-Over-manually operated feature
-Press NEXT to go to fourth programming screen-OR-press exit to save settings & leave



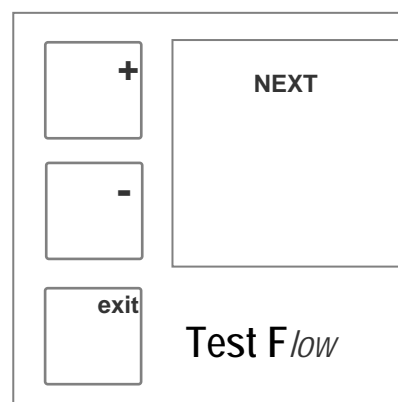
FOURTH SCREEN

Display & Input calibration setting

Spray head flow rate displayed in cc/minute. Also adjusts volume
Flow rate is automatically adjusted by internal algorithms by entering the test flow rate value from the next screen. Unit will calibrate to properly fill a 64 fl.oz. decanter.

If number entered >1300, rate adjusts to LOWER flow rate
If number entered <1300 rate adjusts HIGHER flow rate

Press NEXT to go to fifth programming screen-OR-press exit to save settings & leave



FIFTH SCREEN

1 minute flow test

NOTE: For best results hot water tank should be heated with "READY" icon displayed and tested after at least two full brews.

Have container under spray head

→Use empty container for accuracy

Hold top-left + box down- Do not release finger during flow test
Flow automatically ends in 1 minute
Release immediately after 1 min test

.Carefully & accurately measure the contents in receiving container.

Press NEXT (4X) to scroll to fourth programming screen and enter this amount and press "exit"

→Note: If "ERROR" displays: restart brewer to clear error











INSTALLATION, SAFETY AND HYGIENE DIRECTIONS-FOR CE EQUIPMENT

1. This appliance is only intended for brewing coffee or tea only.
2. Except for the descaling procedure: do not pour liquid other than water into the appliance, this may damage the heater. Do not run appliance dry, always pour in water to top off tank after long periods of non-use.
3. Access to the service area is restricted to persons having safety/hygiene knowledge and practical experience of the coffee brewer. This appliance must be installed in locations where it can be overseen by trained personnel.
4. For proper operation, **install this appliance only indoors where the temperature is between 10°-35°C or 50-95°F**. Drain and remove all liquid from equipment and lines if exposed to freezing temperatures.
5. All commercial cooking equipment, including this unit, is not intended for use by children or persons with reduced physical, sensory, or mental capabilities. Ensure proper supervision of children and keep them away from the unit. Children should be supervised to ensure that they do not play hot beverage equipment.
6. **This unit must be installed and serviced by qualified personnel only.**
7. Installation must conform to all local electrical and plumbing codes. Installation by unqualified personnel will void the unit warranty and may lead to electric shock or burn, as well as damage to unit and/or its surroundings.
8. If the power cord requires repair or replacement-it must be performed by the manufacturer or authorized service personnel with the specified cord only from the manufacturer in order to avoid a hazard.
9. **The appliance must be disconnected from its power source during service and when replacing parts.** During service an operator must be able to check from any position that the plug remains removed. If this is not possible, an electrical disconnection with a locking system in the isolated position shall be provided.
10. Review the dimensions for the unit and verify that it will fit properly in the space intended for it. Verify that the counter or table will support the total weight of the brewer and dispensers when filled (See: Technical Data). Brewers require a sturdy supported surface for operation. Locate operating brewer in a horizontal position only. When the brewer is in position-level it front to back as well as side-to-side. Brewer must be leveled to operate correctly.
Do not tilt appliance more than 10° to insure safe operation. Do not move brewers when filled.
11. The A-weighted sound pressure level is below 70 dB.
12. Unit is for protected indoor use only. **Do not steam clean or use excessive water on unit**
13. This unit is not "jet-proof" construction. **Do not pressure wash or use jet spray to clean this unit.**
14. The unit is not waterproof -**do not submerge or saturate with water.**
Equipment exposed to flood and contaminated must not be used due to electrical and food safety.
Do not operate if unit has been submerged or saturated with water.

Labels and Warnings for Hot Beverage Equipment

LABELS

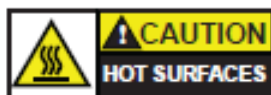
WARNING

	WARNING	To reduce the risk of electric shock or fire.
		FETCO hot beverage equipment is for commercial use only.
		Do not remove or open cover. No user serviceable parts inside. Refer installation, adjustments and service to qualified personnel.
		Warning! Disconnect from power supply before servicing. This appliance is always energized when connected to a power source.
		Locate unit away from source of heat. Do not install or use near combustibles.
		Brewer has hot surfaces. Use care when removing brew basket- Allow time for it to drain completely when brew is completed.
		Use dedicated circuit with capacity rated by local code or National Electrical Code for the current draw of this equipment. Check the serial number plate for power requirements
		Failure to comply with safety warnings risks equipment damage, property damage, fire, burns or shock hazard
		This equipment must be installed with a backflow protection device to comply with federal, state or local municipality codes.
		Read all instructions before installing or operating this unit Pre-fill unit before first use. Fill with pure water only.




1046.00052.00

Brew Basket Area Warning




1046.00050.00

Optional Carafe Warmers (X2)


WARNING

All electrical connections must be in accordance with local electrical codes and any other applicable codes. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid a hazard.

To prevent an electric shock hazard this device must be bonded to equipment in close proximity with an equipotential bonding conductor. This device is equipped with a bonding lug for this purpose and is marked with the following symbol



1046.00049.00

Back Panel of Equipment

FIRST DRAFT FOR REVIEW ONLY-DO NOT RELEASE

-FOR OPERATOR SAFETY

- This appliance is for commercial use only. Commercial cooking equipment may be unsafe for household use
- This appliance is intended for stationary indoor use. Install and service by professional personnel only.
- Brewer is designed for brewing 64 fl.oz/1.8 L of coffee or tea. Pour in water only
- Change brewer to Manual Mode if using the Pour Over option
- Do not press START if in Manual Mode
- Brewer exterior and carafe warmers are hot- keep hands and other items away.
- Hot water in tank is 200°F do not move commercial coffee brewers once installed due to spillage.
- WARNING-brew basket contents are hot-use care! Allow brew to complete, usually five minutes
- Do not immerse the brewer in water or any other liquid

CLEANING AND BREWER CARE

Cleaning the Brewer:

Always empty brew basket and rinse after brewing, rinse decanter, inside and out.

Wipe down both warmer plates and surrounding area with a wet clean cloth as required and whenever spills are present.

Heat transfer from warmer plates is most efficient when decanter and warmer plate surface are clean—use only soap and water.

Never clean brewer or glass surfaces with scouring powders or harsh implements.
Always use a non-abrasive pad, or a wet clean cloth

Never use solvents on plastic components—especially cleaners formulated with the solvent diethylene glycol butyl ether (DGBE)

Cleaning the Spray Head:

Remove spray head, [DANGER SPRAY HEAD MAY BE HOT] use a towel or heavy gloves to prevent burning and cleaned with a brush.

When cleaning the spray head, make sure that each hole is completely free of mineral deposits.

Weekly spray head cleaning may be necessary in areas with extremely hard water.

Monthly may be sufficient in areas which do not have excessive water hardness.

Cleaning the Brew Tube

Using the FETCO 18" 1085.00012.00 Descaling Spring:

Remove spray head - use a towel or heavy gloves to prevent burning as spray head may be hot.

Insert descaling spring for at least 2/3 of its length and reciprocate back and forth, then remove.

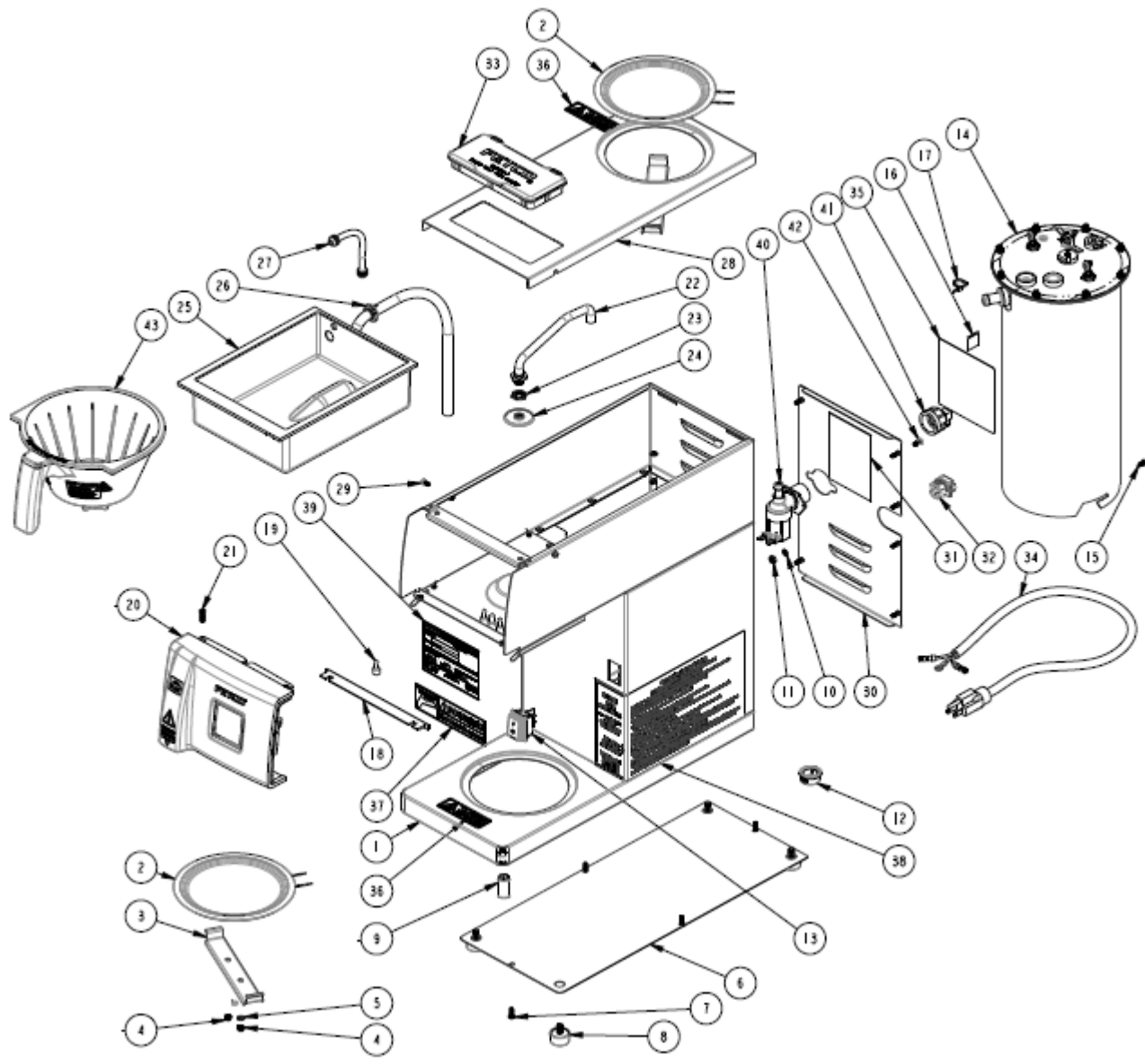
Wipe off spring and repeat. Continue until spring is clear.

Cleaning frequency depends on use or water conditions. We recommend this weekly or monthly-as required.

WATER QUALITY

Optimal water quality brews the best coffee. The brewer also operates with less maintenance by using low mineral water.

Use bottled water or reverse osmosis purified water between 75-250tds in areas with hard water.



FIRST DRAFT FOR REVIEW ONLY-DO NOT RELEASE

Ref	Qty	Part Number	DESCRIPTION
			Drawing 1101.00303.00
1	1	1111.00075.00	WELDMENT BODY COMPLETE, CBS-2121 POUR OVER
2	2	1102.00322.00	ASSY, WARMER PLATE, 120VAC, CBS-2121
3	2	1003.00312.00	BRACKET, WARMER TRAY HOLDER, CBS-2121
4	4	1084.00049.00	NUT, HEX LOCKWASHER, M4x0,7, 18-8 ST. STL.
5	2	1083.00004.00	WASHER, M4, 18-8 SS FLAT
6	1	1001.00307.00	COVER BASE, CBS-2121
7	11	1082.00017.00	SCREW, TRUSS HD. PHIL. MACHINE, # 6-32 X 1/2 LG.
8	4	1073.00021.00	FOOT, RUBBER, 1/4-20
9	2	1023.00263.00	CORNER INSERT FOR BASE, CBS-2121
10	1	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK
11	1	1084.00006.00	NUT, 8-32 18-8 HEX MACHINE SCREW
12	2	1086.00004.00	BUSHING, SNAP, 1" MOUNTING HOLE
13	1	1058.00045.00	SWITCH, POWER, DP, 16A, 125/250 VAC, WATERPROOF
14	1	1104.00139.00	TANK ASSEMBLY, CBS-2121, 1320W/120VAC
15	1	1082.00024.00	SCREW, PAN HEAD, PHILLIPS
16	1	1029.00005.00	MOUNT, TIE, .75' X .75" ADHESIVE
17	1	1066.00002.00	TIE, 6" LONG, CABLE, NATURAL
18	1	1024.00080.00	GASKET, FRONT CBS-2121
19	6	1064.00030.00	CRIMP CONNECTOR, PRE-INSULATED, 22-14 AWG WIRE RANGE
20	1	1102.00327.00	ASSEMBLY FRONT PANEL, CBS-2121 AUTOMATIC POUR OVER
21	4	1082.00058.00	SCREW, # 8-32 X 5/8, FLAT HD, PH, 18-8 SS
22	1	1112.00420.00	WELDMENT, SPRAY CUTTER TUBE FITTING, CBS-2121
23	1	1084.00041.00	HEX NUT, 7/16-20 x 1/8" THK.
24	1	1005.00028.00	WELDING, DOME SPRAY CUTTER, 6-HOLES, CBS-2121
25	1	1023.00260.00	BODY, FILL TOP TANK, CBS-2121
26	1	1024.00097.00	FILL TUBE, CBS-2121, AUTOMATIC
27	1	1024.00091.00	VENT TUBE, CBS-2121
28	1	1001.00308.00	COVER TOP, CBS-2121
29	2	1082.00073.00	SCREW # 6-32 X 3/8", PAN HD PH, MACHINE, 18-8 SS
30	1	1001.00339.00	BACK COVER, CBS-2121, AUTOMATIC
31	1	1401.00143.00	WIRING DIAGRAM, CBS-2121 COMBO, 1-PH (L-N-PE)
32	1	1086.00046.00	BUSHING, STRAIN RELIEF, .12"-.58" DIA CABLE
33	1	1102.00321.00	ASSEMBLY, LID COVER, FILL TANK, CBS-2121
34	1	1102.00334.00	ASSEMBLY, POWER CORD, 120VAC w/NEMA 5-15P PLUG
35	1	1046.00049.00	LABEL, WARNING "ELECTRIC SHOCK OR FIRE", 4x4
36	2	1046.00050.00	LABEL "CAUTION, HOT SURFACE", CBS-2121 POUR OVER
37	1	1046.00052.00	LABEL, WARNING, HOT WATER OVERHEAD
38	1	1046.00048.00	LABEL, WARNING & STARTUP INSTRUCTION, CBS-2121
39	1	1043.00036.00	TEMPLATE, SN LABEL, FETCO PRODUCTS
40	1	1057.00003.00	VALVE, COLD WATER INLET, 24VDC
41	1	1102.00164.00	ADAPTER ASSY, 3/4" BSP X 1/4 SAE FLARE
42	2	1082.00010.00	SCREW, M4x10 ZINC-PLATED PAN HD. PHILLIPS MACH.
43	1	B018200BN2	BB ASSY, 0.200" HOLE, BRN PLUG