# FETCO



# User's Guide





## **Models:**

- ▶ CBS-2131XTS
- **▶ CBS-2132XTS**

One gallon and three liter single and dual airpot brewers

CBS-2131 & CBS-2132XTS 3- liter airpot brewers





c UL us (NSF.)

CBS-2131 & CBS-2132XTS 1-gallon airpot brewers

NOTICE TO INSTALLER: Please leave this book with the machine.

### **Table of Contents**

Contact Information	Hot water convenience tap	14
Description & Features	Error Codes	15
Specifications-North America 3	Airpot use instructions and cleaning	16
CE Electrical Configurations 4	Operator Training	19
Technical Data5	Installation	20
Weights and Capacities & Measurements5	Guide to a Successful Installation	20
Dimensions & Utility Connections Rough-in Drawings 5	Installation Directions	21
Dimensions & Utility Connections Rough-in Drawings 6	Terminal Block Diagram	22
Requirements6	Final Setup	
Accessing equipment and control screens	Parts diagrams, bill of materials lists	24
Layout of the XTS brewer7	Spray Housing Assembly Parts	35
Accessing batch and programming menu screens 7	Brewbasket Parts	35
Operating Instructions8	Wiring Diagrams-North America	36
Programming- operator access programming 10	CE Wiring Diagrams	38
Manu Features: Batch Darameters 11		

FETCO®, LUXUS®, EXTRACTOR®, INTERMITTENT BREW, Driven To Innovate, XTS are trademarks or trade names of Food Equipment Technologies Company, U.S. Patent 7,866,255 7,631,593 6,889,598 6,772,676 6,576,282 6,571,685 6,565,906 6,705,208 6,148,717 6,713,109 & Other Patents Are Pending

### **Contact Information**

**FETCO®** 

Food Equipment Technologies Company

600 Rose Road

Lake Zurich • IL • 60047-0429 • USA

Internet: www.fetco.com

Phone: (800) 338-2699 (US & Canada)

(847) 719-3000 **Fax:** (847) 719-3001

Email: sales@fetco.com

Technical Support techsupport@fetco.com

## **Description & Features**

The CBS-2130XTS Series coffee brewers feature our universal spray over technology, which works like this:

The following variables are programmed for each batch size:

Brew volume

Prewet percent (Percentage of the brew volume)

Brew time

- Prewet delay (The time between prewetting and the brew cycle.)
- Adjustable number of pulses
- Brew water low temperature lockout
- Drip delay (The time between the end of the brew cycle and end of the brewing cycle...to empty the brewbasket.)

Using these variables, the software calculates how much water to use for prewetting and brewing. The total brew time digitally divides into several cycles. Within these cycles, the software calculates how long to spray water over the coffee grounds, and how long to pause before the next cycle begins.

### **Features**

- ❖ Touchscreen EXTRACTOR Operation-XTS™
- Cascading Spray Dome-no holes to clog in sprayhead
- Four fully programmable batch sizes per side
- User programs save to and load from SD cards
- Screen logo customizable by user from SD card
- SD card firmware program and upgrade installation
- Heavier gauge stainless steel cabinet
- Optional gourmet stainless steel brewbasket

- · Magnetic flux brew basket sensor
- Dispenser locator under brew basket
- Brew at temperature protection
- \* Brew mechanism is digitally adjustable
- Totalizing counters for brewer functions
- Customizable batch name
- Batch sizing
- Recipe copy

## **Specifications-North America**

### 3-liter airpot version, Standard Polymeric Brew Basket

Electrical C	Configuration	s CBS_2131XTS-	-Single	3 lite	r airpot version	[STANDAI	RD: Polymeric	Brew Basket]
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	KW	Maximum Amp Draw	Gallon/Hour (3 liters per batch)
E213153	1 X 1.5 kW	100 - 120	1	2+G	NEMA 5-15P	1.1 – 1.6	10.9 – 13.0	3.9 gal/14.8 lit
E213154	1 X 1.7 kW	100 - 120	1	2+G	NEMA 5-15P	1.3 – 1.8	12.3 - 14.7	4.4 gal/16.7 lit
E213151	1 X 2.3 kW	100 - 120	1	2+G	NEMA 5-20P	1.7 – 2.4	16.5 - 19.7	5.8 gal/22 lit
E213157	1 X 3.0 kW	200 - 240	1	2+G	Cord/No Plug	2.2 - 3.1	10.9 – 13.0	7.7 gal/29.1 lit

Electrical C	Configurations	S CBS_2132XTS-	-Dual	3 liter	airpot version [	STANDARI	D: Polymeric	Brew Basket]
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	KW	Maximum Amp Draw	Gallon/Hour (3 liters per batch)
E213251	2 X 2.3 kW	200-240	1	2+G	Terminal Block	3.3 – 4.7	16.5 - 19.7	11.5 gal/43.5 lit
E213252	2 X 3.0 kW	200-240	1	2+G	Terminal Block	4.2 - 6.1	21.3—25.5	14.0 gal/53 lit

## 3-liter airpot version, Optional Stainless Steel Brew Basket

Electrical Co	nfigurations	CBS_2131XTS—S	Single 3	3 liter	airpot version	Optional:	Stainless Steel	Brew Basket]
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	ĸw	Maximum Amp Draw	Gallon/Hour (3 liters per batch)
E213153M	1 X 1.5 kW	100 - 120	1	2+G	NEMA 5-15P	1.1 – 1.6	10.9 – 13.0	3.9 gal/14.8 lit
E213154M	1 X 1.7 kW	100 - 120	1	2+G	NEMA 5-15P	1.3 – 1.8	12.3 - 14.7	4.4 gal/16.7 lit
E213151M	1 X 2.3 kW	100 - 120	1	2+G	NEMA 5-20P	1.7 – 2.4	16.5 - 19.7	5.8 gal/22 lit
E213157M	1 X 3.0 kW	200 - 240	1	2+G	Cord/No Plug	2.2 - 3.1	10.9 – 13.0	7.7 gal/29.1 lit

Electrical	Configuration	s CBS_2132XTS	—Dua	l 3 liter	airpot version	[Optional:	Stainless Ste	el Brew Basket]
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	ĸw	Maximum Amp Draw	Gallon/Hour (3 liters per batch)
E213251M	2 X 2.3 kW	200-240	1	2+G	Terminal Block	3.3 – 4.7	16.5 - 19.7	11.5 gal/43.5 lit
E213252M	2 X 3.0 kW	200-240	1	2+G	Terminal Block	4.2 - 6.1	21.3—25.5	14.0 gal/53 lit

## 1-gallon airpot version, Standard Polymeric Brew Basket

Electrical Co	Electrical Configurations CBS_2131XTS—Single 1 gallon airpot version [STANDARD: Polymeric Brew Basket]										
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	KW	Maximum Amp Draw	Gallon/Hour (1 gallon per batch)			
E213152	1 X 2.3 kW	100 - 120	1	2+G	NEMA 5-20P	1.7 - 2.4	16.5 - 19.7	5.8 gal/22 lit			
E213158	1 X 3.0 kW	200 - 240	1	2+G	Cord/No Plug	2.2 - 3.1	10.9 – 13.0	7.7 gal/29.1 lit			

Electrical C	onfigurations	CBS_2132XTS-	–Dual	1 gallon	airpot version	[STANDAR	D: Polymeric	c Brew Basket]
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	KW	Maximum Amp Draw	Gallon/Hour (1 gallon per batch)
E213253	2 X 3.0 kW	200-240	1	2+G	Terminal Block	4.2 - 6.1	21.3—25.5	14.0 gal/53 lit

### 1-gallon airpot version, Optional Stainless Steel Brew Basket

<b>Electrical Co</b>	nfigurations (	CBS_2131XTS—	Single	1 gallon	airpot version	[Optional:	Stainless Ste	eel Brew Basket]
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	kw	Maximum Amp Draw	Gallon/Hour (1 gallon per batch)
E213152M	1 X 2.3 kW	100 - 120	1	2+G	NEMA 5-20P	1.7 - 2.4	16.5 - 19.7	5.8 gal/22 lit
E213158M	1 X 3.0 kW	200 - 240	1	2+G	Cord/No Plug	2.2 - 3.1	10.9 – 13.0	7.7 gal/29.1 lit

Electrical Co	Electrical Configurations CBS_2132XTS—Dual 1 gallon airpot version [Optional: Stainless Steel Brew Basket]								
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	KW	Maximum Amp Draw	Gallon/Hour (1 gallon per batch)	
E213253M	2 X 3.0 kW	200-240	1	2+G	Terminal Block	4.2 - 6.1	21.3—25.5	14.0 gal/53 lit	

## **CE Electrical Configurations**

### 3-liter airpot version, Standard Polymeric Brew Basket

Electrical C	Electrical Configurations CBS_2131XTS—Single 3 liter airpot version [STANDARD: Polymeric Brew Basket]									
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	KW	Maximum Amp Draw	Gallon/Hour (3 liters per batch)		
E213157	1 X 3.0 kW	200 - 240	1	2+G	Cord/No Plug	2.2 - 3.1	10.9 – 13.0	7.7 gal/29.1 lit		

Electrical (	Electrical Configurations CBS_2132XTS—Dual 3 liter airpot version [STANDARD: Polymeric Brew Basket]									
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	KW	Maximum Amp Draw	Gallon/Hour (3 liters per batch)		
E213252	2 X 3.0 kW	200-240	1	2+G	Terminal Block	4.2 - 6.1	21.3—25.5	14.0 gal/53 lit		

### 3-liter airpot version, Optional Stainless Steel Brew Basket

Electrical C	Configuration	s CBS_2131XTS-	-Single	3 lite	r airpot version	[Optional:	Stainless Ste	el Brew Basket]
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	KW	Maximum Amp Draw	Gallon/Hour (3 liters per batch)
E213157M	1 X 3.0 kW	200 - 240	1	2+G	Cord/No Plug	2.2 - 3.1	10.9 – 13.0	7.7 gal/29.1 lit

Electrical	Configuration	s CBS_2132XTS	—Dua	3 liter	airpot version	[Optional:	Stainless Ste	el Brew Basket]
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	ĸw	Maximum Amp Draw	Gallon/Hour (3 liters per batch)
E213251M	2 X 2.3 kW	200-240	1	2+G	Terminal Block	3.3 – 4.7	16.5 - 19.7	11.5 gal/43.5 lit
E213252M	2 X 3.0 kW	200-240	1	2+G	Terminal Block	4.2 - 6.1	21.3—25.5	14.0 gal/53 lit

## 1-gallon airpot version, Standard Polymeric Brew Basket

Electrical Co	Electrical Configurations CBS_2131XTS—Single 1 gallon airpot version [STANDARD: Polymeric Brew Basket]							
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	KW	Maximum Amp Draw	Gallon/Hour (1 gallon per batch)
E213155M	1 X 2.3 kW	200-240	1	2+G	Cord/No Plug	1.7 – 2.4	8.5 – 10.1	5.8 gal/22 lit
E213158	1 X 3.0 kW	200 - 240	1	2+G	Cord/No Plug	2.2 – 3.1	10.9 – 13.0	7.7 gal/29.1 lit

Electrical C	Electrical Configurations CBS_2132XTS—Dual 1 gallon airpot version [STANDARD: Polymeric Brew Basket]								
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	KW	Maximum Amp Draw	Gallon/Hour (1 gallon per batch)	
	2 X 2.3 kW	200-240	1	2+G	Terminal Block	3.3 – 4.7	16.5 - 19.7	11.5 gal/43.5 lit	
E213253	2 X 3.0 kW	200-240	1	2+G	Terminal Block	4.2 - 6.1	21.3—25.5	14.0 gal/53 lit	

### 1-gallon airpot version, Optional Stainless Steel Brew Basket

Electrical Co	nfigurations (	CBS_2131XTS—	Single	1 gallon	airpot version	[Optional:	Stainless St	eel Brew Basket]
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	KW	Maximum Amp Draw	Gallon/Hour (1 gallon per batch)
E213155M	1 X 2.3 kW	200-240	1	2+G	Cord/No Plug	1.7 – 2.4	8.5 – 10.1	5.8 gal/22 lit
E213158M	1 X 3.0 kW	200 - 240	1	2+G	Cord/No Plug	2.2 - 3.1	10.9 – 13.0	7.7 gal/29.1 lit

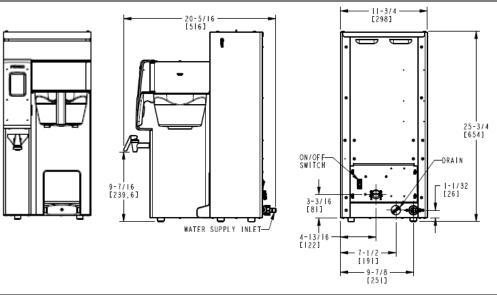
Electrical Configurations CBS_2132XTS—Dual 1 gallon airpot version [Optional: Stainless Steel Brew Basket]								
Configuration Code	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	KW	Maximum Amp Draw	Gallon/Hour (1 gallon per batch)
	2 X 2.3 kW	200-240	1	2+G	Terminal Block	3.3 – 4.7	16.5 - 19.7	11.5 gal/43.5 lit
E213253M	2 X 3.0 kW	200-240	1	2+G	Terminal Block	4.2 - 6.1	21.3—25.5	14.0 gal/53 lit

## **Technical Data**

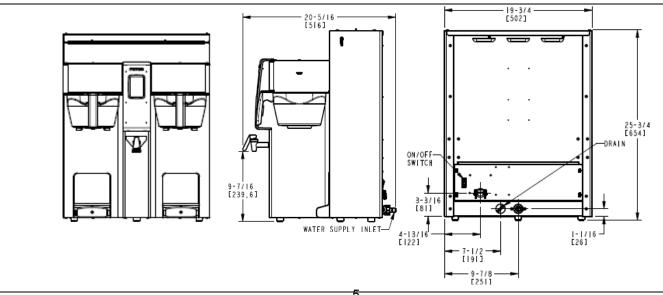
# Weights and Capacities & Measurements 3 liter&1 gallon single and dual brewers

	o morari gamon omgro ama aram promore								
Brewer	Height	Width	Depth	Empty Weight	Filled Weight	Total Weight- Brewer & Filled Dispenser	Hot Water Tank Capacity	Shipping Weight	Shipping Dimensions
CBS-2131XTS	25 ¾"	11 ¾"	20 ¾"	29 lb	55 lb	66.2lb	3.3 gal	41 lb	16" x 23" x 29"
Single-3 liter	655mm	303mm	516mm	13.2kg	25 kg	34.6 kg	12.4 l	18.6 kg	406 x584x737mm
CBS-2132XTS	25 ¾"	19 ¾"	20 ¾"	47lb	92lb	114.4lb	5.8 gal	58lb	23"x 25" x 29"
Dual-3 liter	655mm	502mm	518mm	21.3kg	41.7kg	51.9 kg	22.1 l	26.3kg	584x635x737mm
CBS-2131XTS	27 ¾"	11 <sup>3</sup> / <sub>4</sub> "	20 ¾"	29 lb	55 lb	66.2lb	3.3 gal	41 lb	16" x 23" x 29"
Single-1 gallon	704mm	303mm	516mm	13.2kg	25 kg	34.6 kg	12.4 l	18.6 kg	406 x584x737mm
CBS-2132XTS	27 ¾"	19 ¾"	20 ¾"	47lb	92lb	114.4lb	5.8 gal	58lb	23"x 25" x 29"
Dual-1 gallon	704mm	502mm	518mm	21.3kg	41.7kg	51.9 kg	22.1 l	26.3kg	584x635x737mm

### **Dimensions & Utility Connections Rough-in Drawings**



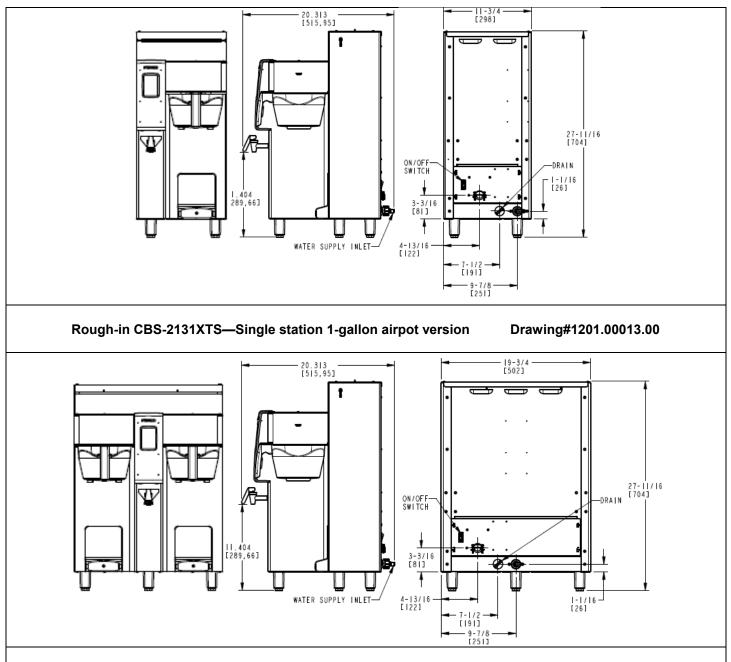
### Rough-in CBS-2131XTS—Single station 3 liter airpot version Drawing#1201.00011.00



Rough-in CBS-2132XTS—Dual station 3 liter airpot version

Drawing#1201.00012.00

### **Dimensions & Utility Connections Rough-in Drawings**



Rough-in CBS-2132XTS—Dual station 1-gallon airpot version

Drawing#1201.00014.00

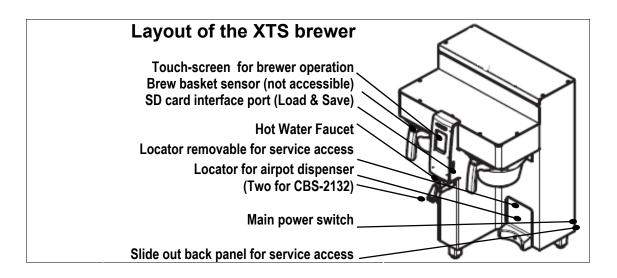
## Requirements

- Water Requirements: 20-75 psig (138-517kPa) 1½gpm/(5.7lpm)
- Water inlet fitting is a 1/4 inch male flare.
- Brew Volume:
   CBS-2131 & 2132XTS—3 liter version: Full Batch=3 liter
   CBS-2131 & 2132XTS—1 gal version Full Batch=1 gal
- Inlet Water Temperature: Cold or Hot supply
- Coffee Filter Size:

13"X5" – standard FETCO # F002

- Electrical: See electrical configuration chart.
- Temperature: 200°F (93°C) inside water tank (at sea level) 195°F (91°C) ± 5° at sprayhead

## Accessing equipment and control screens



## Accessing batch and programming menu screens

### Accessing menu screens for batch selection and brew operation



FETCO home screen

← FETCO HOME SCREEN: **Tap** to enter batch selection screen.

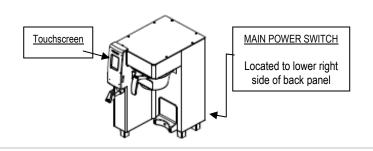
←Tap left or right side batches→

Hold down batch selector pennant to begin brew.



Operation screens

### Accessing menu screens for programming



CB5\_2121

FETCD

FORM RO SERVICE

O TRUST Flock

D Budly
D Rinks

D Rinks

FETCO home screen

From power "OFF" → Turn main power switch to "ON" Touch screen will illuminate

When Complete: FETCO HOME SCREEN will display **Immediately** touch and hold finger to enter programming In 5-8 seconds "PROGRAMMING" screen will appear→



### → Quick brewer setup

### **NOTES**

Install plumbing and electrical utilities.	-See Installation Section in this guide		
Turn rear power switch "ON".	-Located on back, lower right side		
Brewer hot water tank will fill in 4-8 minutes.	-Ready screen will display "■FILLING"		
Heater(s) activate when tank is full	-Ready screen will display "•HEATING"		
Initial heating will be 15-30 minutes	-Place dispenser under brewbasket(s) to collect any overflow and condensate		
Tank displays " • READY" when filled & 200°F/93°C is reached			
Brewer is ready to brew when "• READY" is displayed	-Best results if brewer remains "ON"		

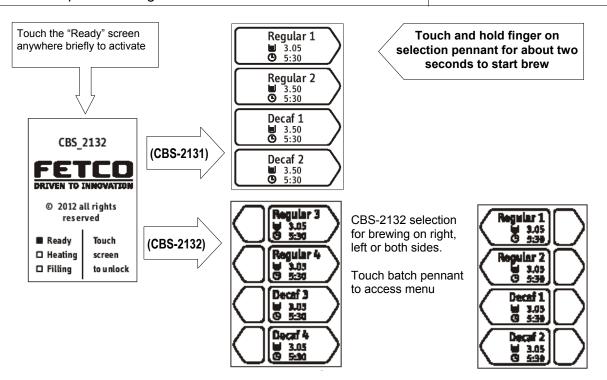
## **Operating Instructions**

### **Brewing**

### →To brew a single 3 liter coffee batch, using default recipe

### **NOTES**

FETCO CBS-2130 series equipment is factory calibrated and preloaded with recipes and is ready to brew.					
Place 13"X5" paper filter in brew basket	-FETCO Product # F002 or any 13"X5"				
Add 3-8 ounces (85 – 227 g) of ground coffee	-Weights given are only suggested				
Insert loaded brewbasket into brewer rails	-Brewbasket(s) must be in place				
Have empty dispenser under brewbasket	-Use the convenient locator guide				
Tap "■ READY" screen to enter the batch selection menu	-A long duration "TAP" with fingertip				
Touch a top batch key for "REGULAR 1"	-Touch batch pennant with fingertip				
Brewer will brew and display the icon for the function step it is in	-lcon may be toggled for information				
On dual side brewer, touch other side to access batches for brewing	-Right to left side switching by touch				
Batch will complete brewing in 5 ½ minutes	-Brew time: 4 minutes+1½ min. drip out				



**Brewing-shown by touchscreen** 

Brew	ver screens displayed for		NOTES
CBS-2131	or corcerts displayed for	CBS-2132	NOTEO
CBS_2131  FETCO  O 2012 all rights reserved  Ready Touch Screen to unlock	"READY SCREEN" Tap screen to display menus	CBS_2132 FETCO  © 2012 all rights reserved  Ready Heating Hilling to unlock	Note: there are three "BREW AT TEMPERATURE DEFINITONS". The "Brew at temperature default routine is shown below
Regular  № 1.50  ③ 5.30  Regular  № 0.75  ④ 4.30   Decaf  № 1.50  ④ 5.30  Decaf  № 0.75  ⑤ 4.30   Decaf  № 0.75   0 4.30	Unit displays four preprogrammed batch buttons per side. CBS-2132 has right and left ←CBS-2131 CBS-2132 →	Regular	Brew basket sensor enabled. Unit is brewable only when brebasket is in place. (option may be disabled by user)
Regular  1.50 5.510  Regular  10.75 4.50  Decaf  1.50 5.330  Decaf  1.50 6.430	Select and hold one button for 2 seconds	Regular 1.501 0.5350  Regular 1.075 0.430  Decaff 1.50 0.75 0.430	Brew at tempertaure enabled: brew will start when tank temperature reaches he set point    INFO   Regular   10.0
Regular INFO S 5:29	Brew started (in prewet) ←CBS-2131 CBS-2132 →	INFO   Regular     1.00	Both sides of CBS-2132 brewing simaltanously.
Regular ■ 1.50 ③ 5:30 °F 205  4:55	Brewing ←CBS-2131 CBS-2132 →	INFO   Regular     1.00	Both sides of CBS-2132 brewing simaltanously.
Regular 1.50	Brewing ←CBS-2131 CBS-2132 →	INFO   Regular     1.00	Both sides of CBS-2132 brewing simaltanously. Left side completing drip delay
Regular INFO © 1.50 © 5:30 °F 205	Brew completed (in drip delay) ←CBS-2131 CBS-2132 →	INFO   Regular	CBS-2132 right side completing drip delay, left side ready for next brew  CBS-2132 right side  Regular  (*) 150 (*) 530  Decal (*) 150

## **Programming-operator access programming**

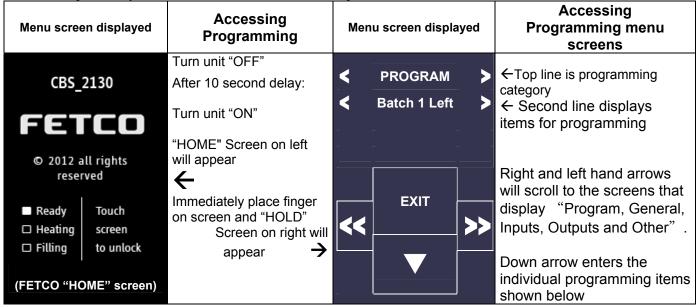
-The FETCO CBS-2130 brewers have four brew batch menus per side.

The menus are preprogrammed with basic settings that will operate the equipment as purchased.

There are two batches each marked "Regular" and two marked "Decaf"

-Most operators prefer a full batch and half batch setting for regular and decaf or specialty coffees. These will need to be programmed by the operator

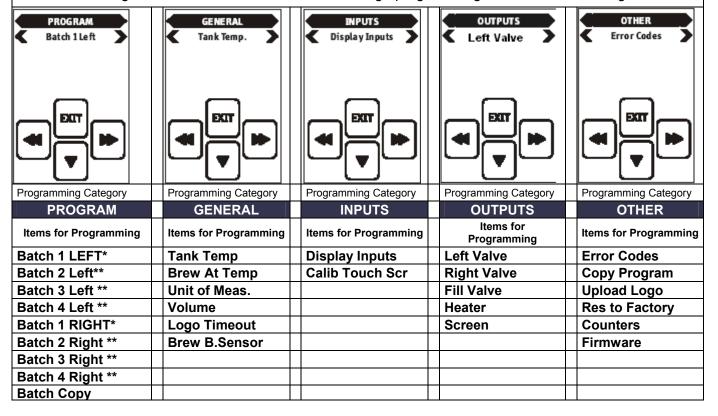
-Settings are adjustable and the names can be changed. -Batch 1 & 4 cannot be disabled.



### Programming-category screens: Menu Tree

### Programming category screens

**To enter:** Turn unit "OFF", After 10 second delay, turn unit "ON", (Home Screen will appear), Immediately place finger on screen and "HOLD" PROGRAM Screen (first below) will appear. Use right/left and down arrows to travel through programming. "EXIT" saves settings



### **Menu Features: Batch Parameters**

PROGRAM	Programming Items	Factory set Default	Programming Range	Notes
Batch 1 LEFT*	<ul> <li>Batch Summary</li> </ul>	Display Summary		
	Batch Name	Regular 1(-16)	Choose from list: Regular1	(Regular 1-16) -OR- Write: any name
	Batch Volume	3.05 liter [ 1.0-4.7]	3.05 liter    1:00	
	Brew Time	4:00 mm:ss	4:00 mm:ss    2:00 10:00	
	Nr Of Pulses	8	8    1 30	
	Prewet Perc.	0%	0 %  _[]  0 15	
	Drip Delay	1:30 mm:ss	1:30 mm:ss I	
Batch 2 Left**	**Batch 2-4—Righ	nt <u>and Batch2-4—Lef</u>	t may be individually selected	d-or-entirely deleted
	Batch ON/OFF	ON	ON    0.94 4.73	
	Batch Summary	Display Summary		
	Batch Name	Regular 1	Regular 1-16;Write own name	
	Batch Volume	3.05 liter [ 1.0-4.7]	3.05 liter	
	Brew Time	4:00 mm:ss	4:00 mm:ss    2:00 10:00	
	Nr Of Pulses	8	8    1 10	
	Prewet Perc.	0%	0 %  _[]  0 15	
	Drip Delay	1:30 mm:ss	1:30 mm:ss    0:30 5:00	
Batch 3 Left **	(See Batch 2-Left)			
Batch 4 Left **	(See Batch 2-Left)			
Batch 1 Right *	(See Batch 1-Left)			
Batch 2 Right **	(See Batch 2-Left)			
Batch 3 Right ** Batch 4 Right **	(See Batch 2-Left)			
Batch Copy	(See Batch 2-Left) Copy From Batch	L1	L1-L4;R1-R4	
Бакси сору	Copy To Batch	L1	L1-L4;R1-R4	
	Copy?	L1→L2? (example)	NO []_  YES NO	
*Batch 1&4 cannot be	disabled. (CBS-2132); *Batch	1 cannot be disabled. (CB	S-2131) **Batch can be disabled	I, and removed from display

GENERAL	Programming Items	Factory set Default	Programming Range (display)	Notes
Tank Temp.		200°F	200 °F    180 207	Correction for high altitude below
Brew at Temp.	"OFF" allows brewing at any temperature.	AUTO	AUTO	SEE NOTE BELOW!
Units of Meas.	Temperature	°F	°F   <u> </u>	
	Volume	Liters	Liters	
Logo Timeout		1:00 mm:ss	1:00 mm:ss  _ <b>[]</b> 0:00 5:00	
Brew B. Sensor		NORMAL	NORMAL    NORMAL OVERRIDE	

INPUTS	Programming Items	Factory set Default	Programming Rang (display)	е	Notes
Display Inputs	• Input		Brew Basket Sensor High Liquid Level probe High Tank Temperature Probe	<ul><li>□</li><li>■</li></ul>	
Display inputs	Summery		Lower Tank Temperature Probe SD Card Recognized		
			USB Drive Recognized		USB is for factory setup only
Cal. Touch Scr		Calibrate	Calibrate		If <u>Yes:</u> Follow directions on the touch screen

BREW AT TEMPERATURE DEFINIT	ONS			
BREW AT TEMP: AUTO (DEFAULT: FACTORY PROGRAMMED INTO BREWER) This allows the "BREW START" to active. If the hot water tank is at the selected temperature—the brew will start. If the temperature is too low, the brewer will wait until the proper temperature is reached. A screen (example to the right) will display showing a thermometer icon and the tank temperature. IMPORTANT: ALWAYS have dispenser(s) under the brew baskets when in the BREW AT TEMP mode.	Regular 3 3.05 5:30 °F 205 198°F			
BREW AT TEMP: ON USER SELECTABLE  "BREW START" Batch Section Buttons will not be accessible until tank temperature is at set point.  The "BREW START" screens with the Batch Section Buttons become accessible when hot water tank is at the selected temperature. The screen at right displays when the "BREW AT TEMP" is selected.	CBS_2132 FETCO  © 2012 all rights reserved  C Ready Heating Filling Filling 192			
BREW AT TEMP: OFF USER SELECTABLE Allows brewing at any temperature above 179°F/82°C. (Not recommended)				

Chart to correct for boiling point for altitude in tank water temperature.			
Altitude (ft.)	Suggested Setting(°F)	Boiling point (° F)	
0	200	212.0	
500	200	211.1	
1000	200	210.2	
2000	200	208.4	
2500	200	207.5	
3000	200	206.6	
3500	197	205.7	
4000	195	204.8	
4500	194	203.9	
5000	194	203.0	
5500	193	202.0	
6000	192	201.1	
6500	191	200.2	
7000	190	199.3	
7500	188	198.3	
8000	187	197.4	

OTHER	Programming Items	Factory set Default	Programming Range (display)	Notes
Error Codes	Display Errors	(Codes)	1: 2: 3:	Chart is below
	Reset Errors	(Reset)	Reset []  YES NO	!!Errors must be corrected and cleared!!
Copy Program	• From SD to B.	SD→ Brewer	SD→ Brewer   	Setup upload  ———————————————————————————————————
	• From B to SD	Brewer→ SD	Brewer→ SD	Setup download  ———————————————————————————————————
Upload Logo		Upload Logo	UPLOAD LOGO Are you sure  I YES NO	Please insert SD card with logo file!
Res to Factory		Reset to default	Reset to Default Are you sure  I YES NO	Completely overwrites all user setup, incl. user logo.
Counters	Display Counters -OR- Reset Counters	Counters Display Total Counters	All Counters	Resetting will restart counter from zero
	• Reset Counters	Reset All Counters	Reset All Counters Are you sure I YES NO	
Firmware	Firmware     Version     -Software type	Firmware Version	SW ver. 1.0.2A HW ver BL ver.1.0.1 QP ver. 4.5.01	Displays firmware version
	Update     Firmware	UPDATE	UPDATE L	Firmware upload Please insert SD card with the firmware file!

## **ERROR CODES**

Error code 50: Shorted temperature probe Error code 51: Open temperature probe

Error code 100: Initial Fill Error. Initial fill time was more than 4 minutes after power up.

Error code 101: Error on refill

Error code 102: Unwanted fill; possible leak Error code 103: Liquid level probe fault

Error code 201: Heater open, high limit thermostat, or Solid State Relay (SSR) fault



**Insert brewbasket!** 

OUTPUTS	Programming Items	Factory set Default	Programming Range (display)	Notes
Left Valve	Left Valve Test	(Press to test)	TEST Press To Test	Runs valve to verify flow. Have container under brewbasket!
,, ,, ,,	• L. Valve Calib	Calibrate *Flow Rate	1540 ml p m  l 500 1800	Factory or service use for flow rate
Left Va	lve display is only for	CBS-2132- dual station	n brewer. CBS-2131 displays RIGH	
Right Valve	Right Valve Test	(Press to test)	TEST Press To Test	Runs Valve to verify flow. Have container under brewbasket!
,, ,, ,,	R. Valve Calib	Calibrate *Flow Rate	1540 ml p m    500 1800	Factory or service use for flow rate
Fill Valve	• Fill Valve Test	(Press to test)	TEST Press To Test	Operates fill valve. Have container under both brewbaskets!
Heater	Heater Test	(Press to test)	TEST Press To Test	Energizes Heater(s) Use for servicing.
Screen	Screen Contrast	Contrast	8  1 1 10	
	S. Brightness	Brightness	8 	

### \*How to calibrate the flow rate

Set the flow rate to compensate for over or under potting

- 1) Measure the flow rate
- -Enter programming mode, scroll left to "OUTPUTS"
- -Scroll down to "Left(or)Right Valve Test"
- -Place 2qt./2 I measuring container under empty brewbasket. One good way to measure is to weigh the test water. Use a scale for at least 2 kg/5lb
- -Press To Test the Brew Valve. →! Keep finger on touchpad for one minute. It is important to keep finger in place for the entire minute.

Measure the flow and hold the number

- 2)Calibrate the flow rate
- -Enter the number measured from the one minute flow rate test (above) into the Calibration Slider
- -After entering the measured volume, exit PROGRAMMING and return to the normal screens

By entering the new flow rate number into the brewer, the software automatically corrects the valve flow discrepancy

## Hot water convenience tap

- 1. The CBS-2130 coffee brewers include a hot water convenience tap for single cup beverage purposes.
- 2. Single use delivery volume should not exceed maximum 16fl.oz/473cc.
- 3. Water dispensed from this faucet is very hot, up to 205°F/96°C

## **Error Codes**

→Co	→Contact specialized personnel for error codes					
Code	Description	Possible Cause	Corrective Action	How to Clear Error Codes		
050	Shorted temperature probe	Probe failure.	Replace probe.			
051	Open temperature probe.	Bad probe connection, or probe failure.	Check all connections. Replace probe if necessary.	TO CLEAR FAULT, Make repairs as required		
100	Initial Fill Error. Initial fill time was more than 4 minutes after power up.	Water supply flow rate is too low.	Watch for short potting during brew cycle. Investigate cause of low flow rate. (Clogged water filter)	Below is the only way to clear error codes  1) Enter "PROGRAMMING"		
101	Error on refill Tank did not refill within 3 minutes.	Water supply flow rate is too low.	Watch for short potting during brew cycle. Investigate cause of low flow rate. (Clogged water filter)	2)Scroll left to "OTHER" 3)Scroll down to		
102	Unwanted fill;	Possible leak in tank, fitting, or valve.	Check inside of machine for leaks.	"ERROR CODES"  4)Scroll down to "Display		
103	Liquid level probe fault	Probe fouled or shorts	Clean, check all connections. Replace probe if necessary.	Errors" 5)Scroll left to "Reset		
201	Heater open, high limit thermostat, or Solid State Relay (SSR) fault	SSR, High Limit, or heating element failure.	Check and replace heating elements if necessary.	Errors" 6)Scroll down to "Reset"		
INSE BRE BAS	EW BREW # 3.05	Brewbasket must be in place	Insert brewbasket	7)Follow directions shown on screen.  Merely toggling ON/OFF switch will not clear error codes.  Error codes must be cleared by entering PROGRAMMING and using the menus!		

## Airpot use instructions and cleaning

## **Dispenser Diagram**



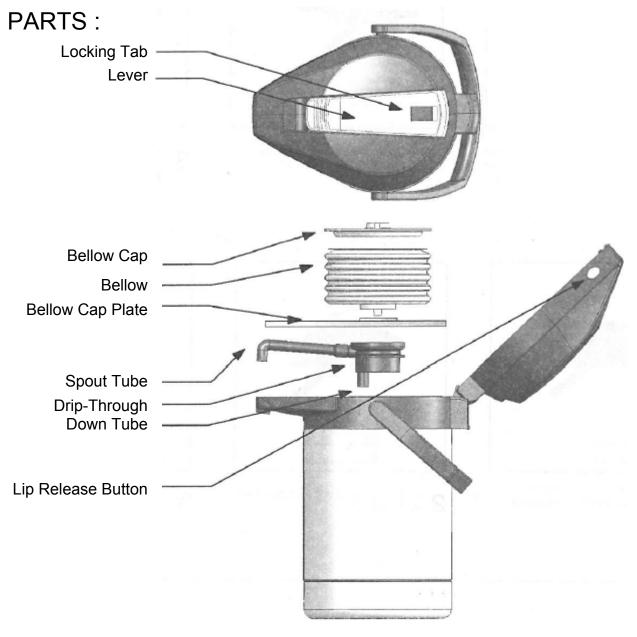
FETCO
DRIVEN TO INNOVATION

D041 (3 liter) and D063 (1 gallon) Airpot

## **DESCRIPTION**: Dispenser Diagram

The FETCO D041 (3 liter) and D063 (1 gallon) airpots are lever type, air pressure evacuated beverage dispenser featuring double-wall, vacuum insulated construction.

The hermetically sealed vacuum double-wall construction provides excellent heat or cold retention, while the stainless steel outer and inner liners provide robust durability.



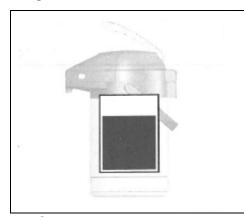
## **Dispenser Operation Instructions**



FETCO
DRIVEN TO INNOVATION ®

D041 (3 liter) and D063 (1 gallon) Airpot

### To Fill:



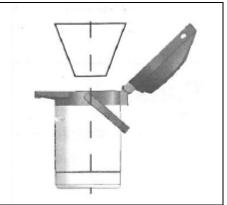
1 Set brewer to dispense the proper amount into the airpot:
3 liters (FETCO D041)
-or-

1gallon (FETCO D063)



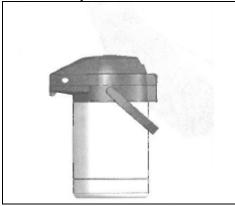
2 Squeeze the *Lid Release Buttons* to release the lid.

Swing the lid completely backwards



Place the airpot under the brewer flush against the airpot dispenser locator (if featured).
Align the center of the airpot Drip-Through with the outlet of the brewbasket.

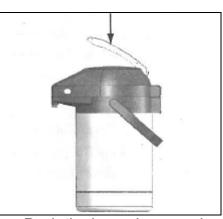
## To Dispense:



1 After the brew cycle is completed:
Remove the airpot from under the brewbasket and close the lid.



2 Lift the handle up until the Lever Lock drops into position, and engages the pump mechanism.



Push the lever downwards multiple times to dispense the desired amount

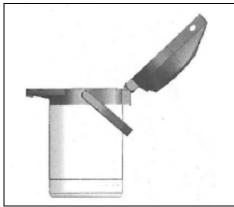
## **Dispenser Cleaning & Maintenance**





D041 (3 liter) and D063 (1 gallon) Airpot

### To Clean:

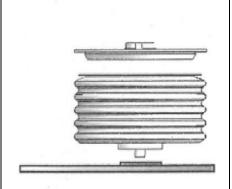


1 Squeeze the Lid Release Buttons to release the lid. Press the Lid Detach Button that will completely detach the lid.

Remove the Lid Cover.



Remove the *Drip-Through*Detach the *Down-Tube*and the *Spout-Tube*.
Clean with warm water,
detergent and a brush.
Proprietary airpot cleaners
such as URNEX® may also
be used.



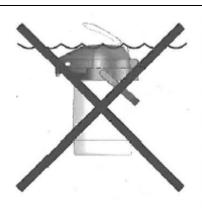
Garefully remove the bellows Cap.
Handling the parts gently, clean the *Bellows*,

Bellows Cap, and Bellow
Cap Plate with warm water, and non-abrasive mild detergent.



4 Clean the interior of the tank with warm water, detergent and a brush. Proprietary airpot cleaners may also be used.

Do not put the airpot into an automatic dishwasher. Do not allow solutions containing chlorine to remain in tank.



5 Clean the exterior of the unit with warm water, non-abrasive mild detergent.

Do not submerge the unit in water



Do not use petroleum based or organic cleaners on food equipment.

Never use cleaners or polishes formulated with the solvent diethylene glycol butyl ether(DGBE) on any non-metallic equipment.

### **Operator Training**

Review the operating procedures with whoever will be using the brewer.

### Pay particular attention to the following areas:

- 1. Always pre-heat the dispensers before the first use of each day by filling them half way with hot water, and letting them stand for at least 5 minutes.
- 2. Do not remove the brew basket from a coffee brewer until it has stopped dripping.
- 3. Make sure the dispenser is empty before brewing into it.
- 4. Show how to attach covers, close, and or secure the dispensers for transporting.
- 5. Show the location and operation of the water shut off valve as well as the circuit breaker for the brewer.
- 6. Steam from the tank will form condensation in the vent tubes. This condensation will drip into and then out of the brew baskets. Up to 1/4 cup/118cc discharging overnight is possible. Place an appropriate container under each brew basket when not in use.
- 7. We recommend leaving the power to the brewer on overnight. The water tank is well insulated and very little electricity is used to keep the tank hot. Leaving the brewer in the "ON" position will also avoid delays at the beginning of shifts for the brewer to reach operating temperature.

#### Cleaning & Maintenance

#### After Each Brew:

- 1. Dispose of grounds and rinse brew basket.
- Never strike a brewbasket or hit it against a hard surface.This will damage the brew cone, and may damage the brewbasket support rails
- 3. Rinse dispensers before reuse.

### **Every Day:**

- 1. Wash brew basket with hot sudsy water.
- 2. Pull CSD from the spray head, it is magnetically attached. Use gloves or a heavy towel. → Wash off any film and reattach. Use vinegar if limescale filming is present.
- 3. Clean dispensers with hot suds water and a brush, rinse and air dry.
- 4. Use only a soft cloth and hot suds on the outside to avoid scratches. Never use abrasives that will scratch surface.

#### Weekly

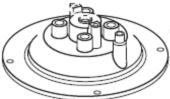
- 1. Use a commercial coffee dispenser cleaner such as URNEX™, TABZ™, DIP-IT™ or Squeak 'n Clean™.
- 2. Carefully Follow the instructions supplied with the cleaning product
- 3. Never use spray cleaners, solvent, solvent based cleaner or petroleum based polish anywhere on dispensers

#### Safety notes

- 1. Professional installation is required. This appliance is manufactured for commercial use only.
- Operation requirements and maintenance for commercial cooking appliances differ from household appliances.
- 3. Operators must be trained for this equipment and must understand the use, maintenance and hazards.
- 1. Do not attempt to move hot beverage equipment once it is filled. Drain equipment before moving.
- 5. CBS-2130 series coffee brewers prepare up to 3 liters/1 gallon of coffee or tea in a single batch using very hot water. For safety, the brew basket is locked and may be serviced 5.5 minutes after starting the brew. The factory set brew (default) time is 5.5 minutes with the brew basket locked for safety from start of brew.
  - $! \rightarrow$  Never attempt to defeat or override a brew basket locking feature.

#### Warning

- 1. Turn off power before any cleaning procedure, including wiping the exterior for appearance reasons.
- 2. Dry the exterior, especially the face panel, before turning on power.
- 3. Do not apply any type of spray cleaner on the face panel of this equipment.
- 1. Never use solvent or solvent-based cleaner or petroleum based polish anywhere on this equipment.
- 5. Dry the face of the touch pad before turning on power
- 3. Do not electrically energize this equipment or attempt operation without all covers in place and all screws fastened.
- 7. Unplug machine before disassembly or servicing.





### Installation

(For Qualified Service Technicians Only)

#### Guide to a Successful Installation

If not installed correctly by qualified personnel, the brewer will not operate properly and damage may result. Damages resulting from improper installation are not covered by the warranty, and will void the warranty. Here are the key points to consider before installation:

#### **Electrical:**

- All FETCO brewers require an electrical ground wire. Installation without grounding is dangerous.
- Verify voltages, polarity, circuits, and circuit breaker access before attaching equipment.
- The electrical diagram is located in the Users Guide and online at www.fetco.com.
- The installation must comply with applicable federal, state, and local codes having jurisdiction at your location. Check with your local inspectors to determine what codes will apply.

#### Plumbing:

- All installations must comply with applicable federal, state, or local plumbing codes.
- An inline water filter is highly recommended. It should be installed after a water shutoff valve and in a position to facilitate filter replacement.
- The water line and newly installed filter cartage must be flushed thoroughly prior to connecting it to the brewer to prevent debris from contaminating the machine.
- Verify that the water line will provide a flow rate of at least 1½gpm/ (5.7lpm) per minute and water pressure is between 20-75 psig (138-517kPa) before making any connections.
- ❖ Install a backflow prevention device if required. Many municipalities require a recognized backflow preventer. Usable on all hot beverage and cold beverage equipment is a WATTS® SD-2 or SD-3. These spring loaded double check valve models are accepted by most zoning authorities.

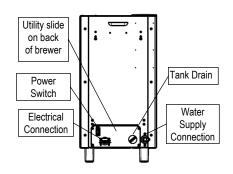
The check valve should be as close to the water supply inlet of the beverage equipment as possible.

#### General:

Utilize only qualified beverage equipment service technicians for installation.

A Service Company Directory is available at www.fetco.com.





### **Installation Directions**

#### **Brewer Setup**

- 1. 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 (specifics-page 3).
- 2. Place the brewer on the counter or stand.
- 3. When the brewer is in position, level it front to back as well as side to side by adjusting the legs.
- 4. For 200-240 volt units: remove the lower utility slide out at the back of the equipment to access the electrical connections. The utility slide must remain close to the unit, Note: it cannot be detached completely.

#### **Water Connection**

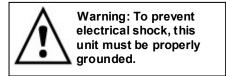
- 1. Water inlet is a ¼ inch male flare fitting.
- 2. The brewer can be connected to a cold or hot water line. Cold water is preferred for best coffee flavor, but

hot water will allow for faster recovery times. High temperature water should not exceed 160°F/71°C.

- 3. Install a water shut off valve near the brewer to facilitate service. An in-line water filter should be used, it should be installed after the water shut off valve and in a position to facilitate filter replacement.
- 4. Flush the water supply line and filter **before** connecting it to the brewer.
- 5. Verify that the water line will provide at least 1½gpm/(5.7lpm) per minute for the CBS-2131& CBS-2132 and also that the water pressure is between 20-75 psig (138-517kPa).before connecting it to the brewer.

#### **Electrical Connection - US & Canada**

- 1. Verify that the actual voltage at the electrical service connection is compatible with the specifications on the brewer's serial number label. Install an electrical ground wire.
- 2. The temperature and water tank fill level are pre-set at the factory. There is no need to turn off the heaters during the installation process. The heaters are disabled by the control board until the tank is full of water. The heating process will start automatically when the tank has filled.
- 3. Most CBS-2131 equipment is factory equipped with a 120 V cord and plug. Some CBS-2131 and all CBS-2132 have a terminal block for connecting the incoming power wires. Consult local codes to determine if a cord and plug can be installed on factory supplied terminal block equipment, or if the unit must be hard wired.
- 4. Plug in unit if the equipment has an attached cord & plug, or, wire into circuit for terminal block units. Note that the plug is NEMA 5-15P or NEMA 5-20P (domestic). If unit is corded without plug, professional installer MUST size and install appropriate plug (also termed PLUG-CAP).
- 5. A fused disconnect switch or circuit breaker on the incoming power line must be conveniently located near the brewer, and its location and markings known to the operators.
- 6. The body of the brewer must be grounded to a suitable building ground. A ground lug is provided in the brewer next to the power terminal block. Use 10 gauge copper wire for grounding.
- 7. Electrical connections must be secured in-place within the unit to meet national and local standards.





Terminal Block Diagram
Electrical Configurations Terminal Block Diagram – North America & International

CBS-2131 120 volt models	(some)CBS-2131 and (all)CBS-2132 208-240 volt models
Factory Configuration:	Factory Configuration:
Attached cord 120 VAC, 3 wires	Terminal block for professional installation
GROUND LUG  LUG  LUG  L2 - NOT USED  For 120 volt  CORD WITH  NEMA 5-15P or 5-20P  or without PLUG	GROUND LUG  GROUND WIRE  MUST BE INSTALLED!  N NOT USED 208-240V
NOTE:	→ NEW FETCO CONFIGURATION METHOD!

### **Final Setup**

### Final Setup

- 1. Turn on incoming water supply line and carefully inspect both inside and outside of the brewer for leaks in all fittings and tubes
- 2. Turn on power.
- 3. Press the brewer's main power switch (located on the lower right of the back of the equipment)

### SCREENS SHOWN TO THE RIGHT WILL APPEAR

- 4. The water tank will begin filling. FETCO Home Screen #1 will read "FILLING".
- 5. When the water level rises and is sensed by the probe at the top of the tank the heaters will activate
- 6. Heaters are automatically disabled until the tank is full.

7. While the water is heating Screen #2 "HEATING" will display and the actual water temperature will be displayed.

- 8. After the water has reached the set temperature Screen #3 will display "READY"
- 9. Review the Operating Instructions. Brew one full batch (water only) on each side to confirm proper fill levels. The brewer is factory set with water only (no coffee) to dispense the correct amount of water. If the actual volume is slightly different from the programmed volume, fine tuning the brewer may be necessary. See Calibrate Valves in the OUTPUT section in the PROGRAMMING section.
- Re-attach the covers after one final inspection for leaks. Look closely in the top of the brewer section at the dispense fittings during this inspection.

FETCO Home Screen #1 "FILLING"

CBS\_2132
FETCD
DRAW TO ENWIRON

© 2012 all rights
reserved

Ready Touch
Screen
filling to unlock

FETCO Home Screen #2 "HEATING"

CBS\_2132
FETCD
HUMIN TO ENGAGE 2012 all rights
reserved

Ready Tank T.°F
Heating Filling
Filling

FETCO Home Screen #3 "READY

CBS\_2132
FEUCE

PETURE TO SREDWIG SON
© 2012 all rights
reserved
■ Ready
□ Heating
□ Filling
□ to unlock

# FETCO<sub>®</sub> CBS-2130XTS COFFEE BREWING SYSTEM

Complete Commercial Parts Listing

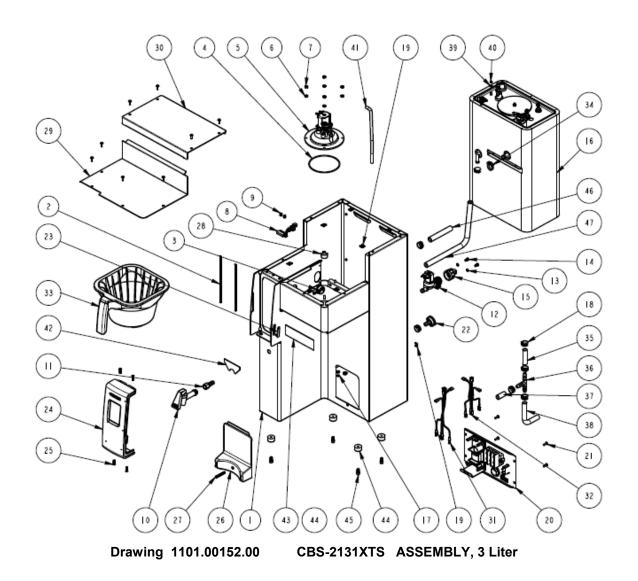
For CBS-2131XTS and CBS-2132XTS Model Range Includes types for the 3 liter and 1 gallon airpot dispensers

NEW August, 2013

Please see our website-www.fetco.com for the most up to date listings and additional parts and service information

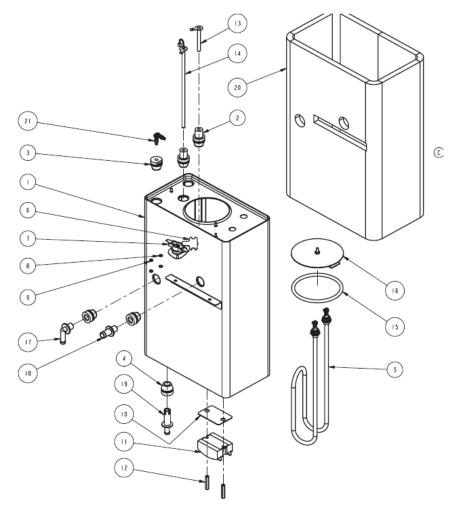
Designs, materials, specifications, physical dimensions, firmware and software protocol for equipment or replacement parts are subject to change without notice.

Parts diagrams, bill of materials lists

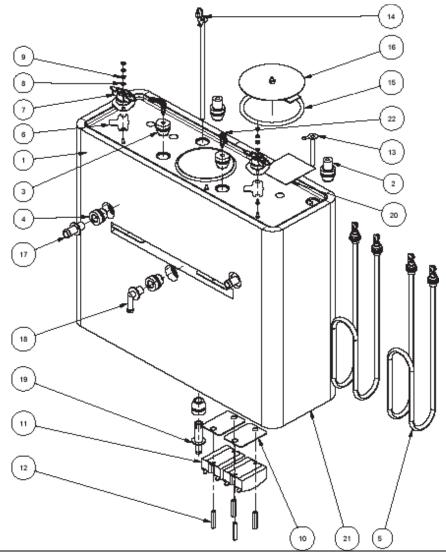


Drawing 1101.00152.00 CBS-2131XTS ASSEMBLY, 3 Liter Ref# Qty Part number **Description** WELDMENT BODY, COMPLETE, CBS-2131 1 1 1111.00036.00 2 2 1024.00049.00 EDGE PROTECTOR, 7.00"LG, CBS-2130 BUSHING, SNAP, 1" MOUNTING HOLE 3 1 1086.00004.00 O-RING, 3 15/16" x 3/32" CS, DASH # 154, BUNA-N, 4 1 1024.00063.00

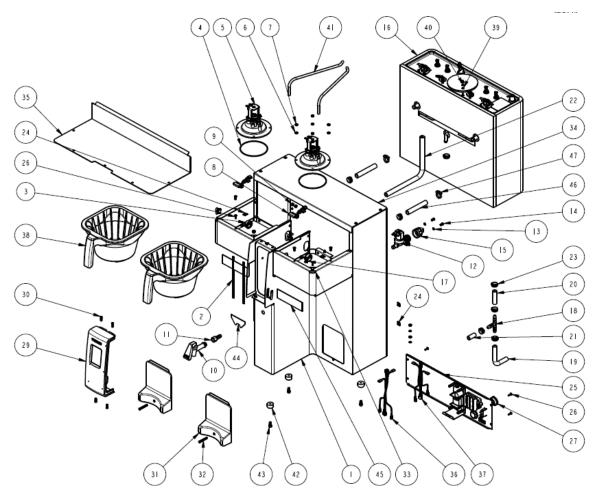
5	1	1102.00203.00	ASSEMBLY, SPRAY HOUSING, DSVP11 DESIGN
6	4	1083.00010.00	WASHER, #10 SCREW W/NEOPRENE-BONDED SEAL
7	8	1084.00006.00	NUT, 8-32 18-8 HEX MACHINE SCREW
8	1	1102.00113.00	SWITCH, REED, ASSEMBLY
9	2	1029.00006.00	#4-40 NYLON FINGER NUT
10	1	1071.00010.00	FAUCET HPSC-BR-8 REGULAR HANDLE
11	1	1031.00003.00	FITTING, BARB 3/8'ID x 1/4" FPT
12	1	1057.00043.00	SOLENOID VALVE, SINGLE, 180 DEG, 24VDC
13	2	1083.00005.00	WASHER, M4 18-8 INTERNAL TOOTH LOCKWASHER
14	2	1082.00010.00	SCREW, M4x10 ZINC PLATED PAN PHILLIPS MACHINE
15	1	1102.00164.00	ADAPTER ASSY, 3/4" BSP X 1/4 SAE FLARE
16	1	1104.00053.00	TANK ASSY, 2300W/120VAC, CBS-2131, GROMMETS
16	1	1104.00056.00	TANK ASSY, 3000W/240VAC,, CBS-2131, GROMMETS
17	4	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK
18	8	1086.00003.00	UNICLAMP, 15.9 HOSE OD CLAMP
19	11	1084.00011.00	NUT, CLIP ON (J-NUT), #6-32, 22-20 GA., BLK-PH FINISH
20	1	1102.00209.00	ASSEMBLY BACK PANEL, CBS-2131 AND 2141
21	12	1082.00017.00	SCREW, # 6-32 X 1/2" TRUSS HD PHIL., MACHINE
22	1	1023.00147.00	PLUG, TANK SERVICE DRAIN FOR 18GA AND UP BODY
23	1	1024.00040.00	CARD PLUG, HWD-2100
24	1	1102.00210.00	ASSEMBLY FRONT PANEL, CBS-2100 GRAVITY VERSION
25	4	1082.00058.00	SCREW, # 8-32 X 5/8, FLAT HD, PH, 18-8 SS
26	1	1102.00182.00	ASSEMBLY, LOCATOR CBS-2130
27	1	1082.00065.00	SCREW #8-32 X 1 1/2", FLAT HD PH, 18-8 SS
28	1	1023.00159.00	CORNER INSERT
29	1	1001.00126.00	COVER, UPPER BASE, CBS-2131 AND 2141
30	1	1001.00125.00	COVER, TOP CBS-2131 AND 2141
31	1	1402.00040.00	HARNESS, HIGH AMP, CBS-2131
32	1	1402.00039.00	HARNESS, LOW AMP, CBS-2131
33	1	B014218B2	BREW BASKET ASS'Y.,POLY, Ø.218, CBS-2100's, BLK. PLUG
33	1	B012218B1	Brewbasket ass'y., Optional, Ø.218, CBS-2100's Stainless Steel
34	1	1086.00002.00	CLAMP, HOSE, SIZE "G" NYLON
35	1	1025.00060.00	TUBE, 9/16'OD X 5/16"ID X 3.25"LG
36	1	1029.00002.00	FITTING, HOSE BARB TEE, SIZE 3/8", NYLON
37	1	1025.00058.00	TUBE, 9/16'OD X 5/16"ID X 25.00"LG
38	1	1025.00077.00	TUBE, 9/16 OD x 5/16 ID x 6.50 LG.
39	1	1083.00009.00	WASHER, #6 SCREW , INTL TOOTH LOCKWASHER
40	1	1084.00010.00	NUT, HEX, #6-32, UNDERSIZED, ZINC PLATED
41	1	1025.00078.00	TUBE, 5/16 OD x 3/16 ID x 14.00 LG.
42	1	1046.00006.00	LABEL, WARNING, "HOT WATER FAUCET"
43	1	1046.00003.00	LABEL, CSD WARNING, 1.5" X 5.0"
44	4	1073.00008.00	FOOT, CBS-2130
45	4	1082.00066.00	SCREW 1/4-20 X 1/2", SOCKET HD CUP
46	1	1025.00076.00	TUBE, 5/8 OD x 3/8 ID x 3.75 LG
47	1	1025.00028.00	TUBE, 5/8"OD X 3/8"ID X 11"LG, HOT WATER VALVE, IN



	Drawing 1104.00053.00 TANK ASSY, CBS-2131XTS				
Ref#	Qty	Part number	Description		
1	1	1114.00080.00	WELDMENT TANK CBS-2131, GROMMET DESIGN		
2	2	1024.00053.00	LEVEL AND TEMP PROBE GROMMET		
3	1	1024.00062.00	GROMMET, SHORT, SILICONE, LEVEL AND TEMP PROBE		
4	3	1024.00050.00	GROMMET, SILICONE, 11.4mm ID		
5	1	1107.00019.00	HEATER ASSEMBLY, IMMERSION 2300W/120VAC		
5	1	1107.00021.00	HEATER ASSEMBLY, IMMERSION 1500W/120VAC		
5	1	1107.00022.00	HEATER ASSEMBLY, IMMERSION 1700W/120VAC		
5	1	1107.00018.00	HEATER ASSEMBLY, IMMERSION 3000W/240VAC		
6	1	1003.00005.00	BRACKET, ONE SHOT THERMOSTAT		
7	1	1053.00003.00	THERMOSTAT, SINGLE SHOT, 240V/40A		
8	2	1083.00009.00	WASHER, #6 SCREW , INTL TOOTH LOCKWASHER		
9	2	1084.00010.00	NUT, HEX, #6-32, UNDERSIZED, ZINC PLATED		
10	1	1003.00140.00	ALUMINUM BRACKET FOR SSR		
11	1	1052.00014.00	ASSEMBLY RELAY, SOLID STATE, 25A/230V		
12	2	1081.00042.00	STANDOFF, 6-32 x1.25 LG.,1/4 HEX WIDTH		
13	1	1112.00002.00	PROBE WELDMENT, WATER LEVEL 2.25" LG		
14	1	1102.00161.00	PROBE ASSEMBLY, TEMP. AND LLC, HWD-2100		
15	1	1024.00007.00	O-RING, DASH #344, TANK COVER		
16	1	1102.00007.00	TANK COVER ASSEMBLY		
17	1	1023.00183.00	FITTING, DILUTION, TBS-2121		
18	1	1023.00167.00	FITTING, BREW, GROMMET DESIGN		
19	1	1023.00166.00	FITTING, COLD WATER INLET, GROMMET DESIGN		
20	1	1022.00063.00	TANK INSULATION, CBS-2131e, GROMMET DESIGN		
21	1	1029.00023.00	FITTING, SINGLE BARBED ELBOW, 1/4", KYNAR		

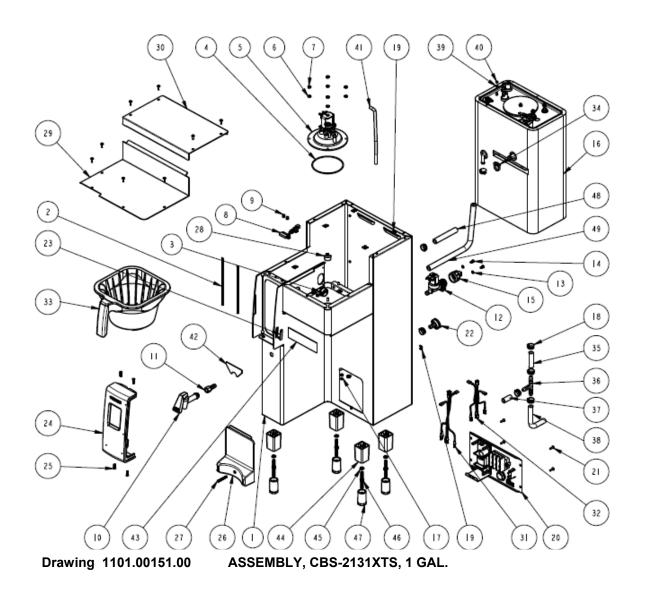


	Drawing 1104.00052.00 TANK ASSY, CBS-2132XTS				
Ref#	Qty	Part number	Description		
1	1	1114.00081.00	WELDMENT TANK CBS-2132, GROMMET DESIGN		
2	2	1024.00053.00	LEVEL AND TEMP PROBE GROMMET		
3	2	1024.00062.00	GROMMET, SHORT, SILICONE, LEVEL AND TEMP PROBE		
4	4	1024.00050.00	GROMMET, SILICONE, 11.4mm ID		
5	2	1107.00018.00	HEATER ASSEMBLY, IMMERSION 3000W/240VAC		
6	2	1003.00005.00	BRACKET, ONE SHOT THERMOSTAT		
7	2	1053.00004.00	THERMOSTAT, SINGLE SHOT, 25A		
8	4	1083.00009.00	WASHER, #6 SCREW , INTL TOOTH LOCKWASHER		
9	4	1084.00010.00	NUT, HEX, #6-32, UNDERSIZED, ZINC PLATED		
10	2	1003.00140.00	ALUMINUM BRACKET FOR SSR		
11	2	1052.00014.00	ASSEMBLY RELAY, SOLID STATE, 25A/230V		
12	4	1081.00042.00	STANDOFF, 6-32 x1.25 LG.,1/4 HEX WIDTH		
13	1	1112.00002.00	PROBE WELDMENT, WATER LEVEL 2.25" LG		
14	1	1102.00161.00	PROBE ASSEMBLY, TEMP. AND LLC, HWD-2100		
15	1	1024.00007.00	O-RING, DASH #344, TANK COVER		
16	1	1102.00007.00	TANK COVER ASSEMBLY		
17	2	1023.00167.00	FITTING, BREW, GROMMET DESIGN		
18	1	1023.00183.00	FITTING, DILUTION, TBS-2121		
19	1	1023.00166.00	FITTING, COLD WATER INLET, GROMMET DESIGN		
20	1	1044.00004.00	LABEL, DANGER, HIGH VOLTAGE		
21	1	1022.00064.00	INSULATION TANK, ONE PIECE, CBS-2132		
22	2	1029.00023.00	FITTING, SINGLE BARBED ELBOW, 1/4", KYNAR		

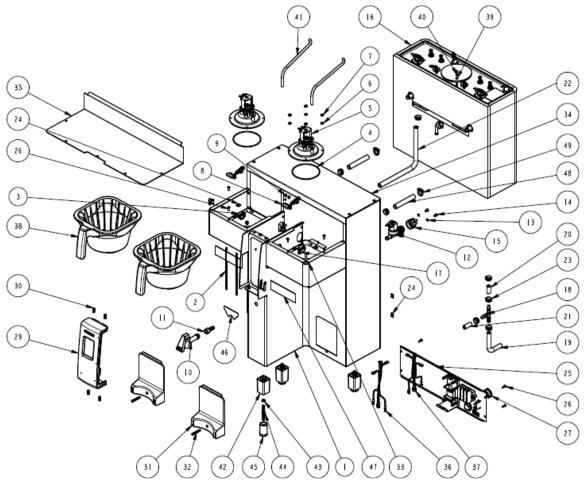


Drawing 1101.00153.00 CBS-2132XTS ASSEMBLY, 3 Liter

	Drawing 1101.00153.00 CBS-2132XTS ASSEMBLY, 3 Liter		
Ref#	Qty	Part number	Description
1	1		WELDMENT BODY, COMPLETE, CBS-2132
2	2	1024.00049.00	EDGE PROTECTOR, 7.00"LG, CBS-2130
3	2	1086.00004.00	BUSHING, SNAP, 1" MOUNTING HOLE
4	2	1024.00063.00	O-RING, 3 15/16" x 3/32" CS, DASH # 154, BUNA-N
5	2	1102.00203.00	ASSEMBLY, SPRAY HOUSING, DSVP11 DESIGN
6	8	1083.00010.00	WASHER, #10 SCREW W/NEOPRENE-BONDED SEAL
7	12	1084.00006.00	NUT, 8-32 18-8 HEX MACHINE SCREW
8	2	1102.00113.00	SWITCH, REED, ASSEMBLY
9	4	1029.00006.00	#4-40 NYLON FINGER NUT
10	1	1071.00010.00	FAUCET HPSC-BR-8 REGULAR HANDLE
11	1	1031.00003.00	FITTING, BARB 3/8'ID x 1/4" FPT
12	1	1057.00043.00	SOLENOID VALVE, SINGLE, 180 DEG, 24VDC
13	2	1083.00005.00	WASHER, M4 18-8 INTERNAL TOOTH LOCKWASHER
14	2	1082.00010.00	SCREW, M4x10 ZINC PLATED PAN PHILLIPS MACHINE
15	1	1102.00164.00	ADAPTER ASSY, 3/4" BSP X 1/4 SAE FLARE
16	1	1104.00052.00	TANK ASSY, 2 X 3000W/240VAC, CBS-2132, GROMMETS
17	4	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK
18	1	1029.00002.00	FITTING, HOSE BARB TEE, SIZE 3/8" , NYLON
19	1	1025.00077.00	TUBE, 9/16 OD x 5/16 ID x 6.50 LG.
20	1	1025.00060.00	TUBE, 9/16'OD X 5/16"ID X 3.25"LG
21	1	1025.00058.00	TUBE, 9/16'OD X 5/16"ID X 25.00"LG
22	1	1025.00028.00	TUBE, 5/8"OD X 3/8"ID X 11"LG, HOT WATER VALVE, IN
23	9	1086.00003.00	UNICLAMP, 15.9 HOSE OD CLAMP
24	12	1084.00011.00	NUT, CLIP ON (J-NUT), #6-32, 22-20 GA., BLK-PH FINISH
25	1	1102.00208.00	ASSEMBLY BACK PANEL, CBS-2132 AND 2142
26	13	1082.00017.00	SCREW, # 6-32 X 1/2" TRUSS HD PHIL., MACHINE
27	1	1023.00147.00	PLUG, TANK SERVICE DRAIN FOR 18GA AND UP BODY
28	1	1024.00040.00	CARD PLUG, HWD-2100
29	1	1102.00210.00	ASSEMBLY FRONT PANEL, CBS-2100 GRAVITY VERSION
30	4	1082.00058.00	SCREW, # 8-32 X 5/8, FLAT HD, PH, 18-8 SS
31	2	1102.00182.00	ASSEMBLY, LOCATOR CBS-2130
32	2	1082.00065.00	SCREW #8-32 X 1 1/2", FLAT HD PH, 18-8 SS
33	2	1023.00159.00	CORNER INSERT
34	1	1001.00127.00	COVER, TOP CBS-2132 AND 2142
35	1	1001.00128.00	COVER, UPPER BASE, CBS-2132 AND 2142
36	1	1402.00037.00	HARNESS, HIGH AMP, CBS-2132 GRAVITY
37	1	1402.00038.00	HARNESS, LOW AMP, CBS-2132 GRAVITY
38	2	B014218B2	BREW BASKET ASS'Y.,POLY, Ø.218, CBS-2100's, BLK. PLUG
38	2	B012218B1	Brewbasket ass'y., Optional, Ø.218, CBS-2100's Stainless Steel
39	1	1083.00009.00	WASHER, #6 SCREW , INTL TOOTH LOCKWASHER
40	1	1084.00010.00	NUT, HEX, #6-32, UNDERSIZED, ZINC PLATED
41	2	1025.00078.00	TUBE, 5/16 OD x 3/16 ID x 14.00 LG.
42	3	1073.00008.00	FOOT, CBS-2130
43	3	1082.00066.00	SCREW 1/4-20 X 1/2", SOCKET HD CUP
44	1	1046.00006.00	LABEL, WARNING, "HOT WATER FAUCET"
45	2	1046.00003.00	LABEL, CSD WARNING, 1.5" X 5.0"
46	2	1025.00076.00	TUBE, 5/8 OD x 3/8 ID x 3.75 LG.
47	2	1086.00002.00	CLAMP, HOSE, SIZE "G" NYLON



		Drawing 1101	.00151.00 ASSEMBLY, CBS-2131XTS, 1 GAL.
Ref#	Qty	Part number	Description
1	1	1111.00036.00	WELDMENT BODY, COMPLETE, CBS-2131
2	2	1024.00049.00	EDGE PROTECTOR, 7.00"LG, CBS-2130
3	1	1086.00004.00	BUSHING, SNAP, 1" MOUNTING HOLE
4	1	1024.00063.00	O-RING, 3 15/16" x 3/32" CS, DASH # 154, BUNA-N,
5	1	1102.00203.00	ASSEMBLY, SPRAY HOUSING, DSVP11 DESIGN
6	4	1083.00010.00	WASHER, #10 SCREW W/NEOPRENE-BONDED SEAL
7	8	1084.00006.00	NUT, 8-32 18-8 HEX MACHINE SCREW
8	1	1102.00113.00	SWITCH, REED, ASSEMBLY
9	2	1029.00006.00	#4-40 NYLON FINGER NUT
10	1	1071.00010.00	FAUCET HPSC-BR-8 REGULAR HANDLE
11	1	1031.00003.00	FITTING, BARB 3/8'ID x 1/4" FPT
12	1	1057.00043.00	SOLENOID VALVE, SINGLE, 180 DEG, 24VDC
13	2	1083.00005.00	WASHER, M4 18-8 INTERNAL TOOTH LOCKWASHER
14	2	1082.00010.00	SCREW, M4x10 ZINC PLATED PAN PHILLIPS MACHINE
15	1	1102.00164.00	ADAPTER ASSY, 3/4" BSP X 1/4 SAE FLARE
16	1	1104.00053.00	TANK ASSY, 2300W/120VAC, CBS-2131, GROMMETS
16	1	1104.00056.00	TANK ASSY, 3000W/240VAC,, CBS-2131, GROMMETS
17	4	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK
18	8	1086.00003.00	UNICLAMP, 15.9 HOSE OD CLAMP
19	11	1084.00011.00	NUT, CLIP ON (J-NUT), #6-32, 22-20 GA., BLK-PH FINISH
20	1	1102.00209.00	ASSEMBLY BACK PANEL, CBS-2131 AND 2141
21	12	1082.00017.00	SCREW, # 6-32 X 1/2" TRUSS HD PHIL., MACHINE
22	1	1023.00147.00	PLUG, TANK SERVICE DRAIN FOR 18GA AND UP BODY
23	1	1024.00040.00	CARD PLUG, HWD-2100
24	1	1102.00210.00	ASSEMBLY FRONT PANEL, CBS-2100 GRAVITY VERSION
25	4	1082.00058.00	SCREW, # 8-32 X 5/8, FLAT HD, PH, 18-8 SS
26	1	1102.00182.00	ASSEMBLY, LOCATOR CBS-2130
27	1	1082.00065.00	SCREW #8-32 X 1 1/2", FLAT HD PH, 18-8 SS
28	1	1023.00159.00	CORNER INSERT
29	1	1001.00126.00	COVER, UPPER BASE, CBS-2131 AND 2141
30	1	1001.00125.00	COVER, TOP CBS-2131 AND 2141
31	1	1402.00040.00	HARNESS, HIGH AMP, CBS-2131
32	1	1402.00039.00	HARNESS, LOW AMP, CBS-2131
33	1	B014218B2	BREW BASKET ASS'Y.,POLY, Ø.218, CBS-2100's, BLK. PLUG
33	1	B012218B1	Brewbasket ass'y., Optional, Ø.218, CBS-2100's Stainless Steel
34	1	1086.00002.00	CLAMP, HOSE, SIZE "G" NYLON
35	1	1025.00060.00	TUBE, 9/16'OD X 5/16"ID X 3.25"LG
36	1	1029.00002.00	FITTING, HOSE BARB TEE, SIZE 3/8", NYLON
37	1	1025.00058.00	TUBE, 9/16'OD X 5/16"ID X 25.00"LG
38	1	1025.00077.00	TUBE, 9/16 OD x 5/16 ID x 6.50 LG.
39	1	1083.00009.00	WASHER, #6 SCREW , INTL TOOTH LOCKWASHER
40	1	1084.00010.00	NUT, HEX, #6-32, UNDERSIZED, ZINC PLATED
41	1	1025.00078.00	TUBE, 5/16 OD x 3/16 ID x 14.00 LG.
42	1	1046.00006.00	LABEL, WARNING, "HOT WATER FAUCET"
43	1	1046.00003.00	LABEL, CSD WARNING, 1.5" X 5.0"
44	4	1023.00163.00	LEG BODY, CBS-2130
45	4	1083.00021.00	WASHER, 1/4" SCREW SIZE, SPRING LOCK
46	4	1112.00158.00	WELDMENT, LEG ROD, CBS-2130
47	4	1021.00017.00	LEG INSERT THREADED, CBS-2130
48	1	1025.00076.00	TUBE, 5/8 OD x 3/8 ID x 3.75 LG.
49	1	1025.00028.00	TUBE, 5/8"OD X 3/8"ID X 11"LG, HOT WATER VALVE, IN

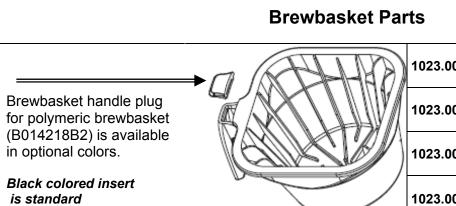


Drawing 1101.00150.00

CBS-2132XTS ASSEMBLY, 1 gallon

		Drawing 1101.	00150.00 CBS-2132XTS ASSEMBLY, 1 gallon
Ref#	Qty	Part number	Description
1	1	1111.00037.00	WELDMENT BODY, COMPLETE, CBS-2132
2	2	1024.00049.00	EDGE PROTECTOR, 7.00"LG, CBS-2130
3	2	1086.00004.00	BUSHING, SNAP, 1" MOUNTING HOLE
4	2	1024.00063.00	O-RING, 3 15/16" x 3/32" CS, DASH # 154, BUNA-N
5	2	1102.00203.00	ASSEMBLY, SPRAY HOUSING, DSVP11 DESIGN
6	8	1083.00010.00	WASHER, #10 SCREW W/NEOPRENE-BONDED SEAL
7	12	1084.00006.00	NUT, 8-32 18-8 HEX MACHINE SCREW
8	2	1102.00113.00	SWITCH, REED, ASSEMBLY
9	4	1029.00006.00	#4-40 NYLON FINGER NUT
10	1	1071.00010.00	FAUCET HPSC-BR-8 REGULAR HANDLE
11	1	1031.00003.00	FITTING, BARB 3/8'ID x 1/4" FPT
12	1	1057.00043.00	SOLENOID VALVE, SINGLE, 180 DEG, 24VDC
13	2	1083.00005.00	WASHER, M4 18-8 INTERNAL TOOTH LOCKWASHER
14	2	1082.00010.00	SCREW, M4x10 ZINC PLATED PAN PHILLIPS MACHINE
15	1	1102.00164.00	ADAPTER ASSY, 3/4" BSP X 1/4 SAE FLARE
16	1	1104.00052.00	TANK ASSY, 2 X 3000W/240VAC, CBS-2132, GROMMETS
17	4	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK
18	1	1029.00002.00	FITTING, HOSE BARB TEE, SIZE 3/8", NYLON
19	1	1025.00077.00	TUBE, 9/16 OD x 5/16 ID x 6.50 LG.
20	1	1025.00060.00	TUBE, 9/16'OD X 5/16"ID X 3.25"LG
21	1	1025.00058.00	TUBE, 9/16'OD X 5/16"ID X 25.00"LG
22	1	1025.00028.00	TUBE, 5/8"OD X 3/8"ID X 11"LG, HOT WATER VALVE, IN
23	9	1086.00003.00	UNICLAMP, 15.9 HOSE OD CLAMP
24	12	1084.00011.00	NUT, CLIP ON (J-NUT), #6-32, 22-20 GA., BLK-PH FINISH
25	1	1102.00208.00	ASSEMBLY BACK PANEL, CBS-2132 AND 2142
26	13	1082.00017.00	SCREW, # 6-32 X 1/2" TRUSS HD PHIL., MACHINE
27	1	1023.00147.00	PLUG, TANK SERVICE DRAIN FOR 18GA AND UP BODY
28	1	1024.00040.00	CARD PLUG, HWD-2100
29	1	1102.00210.00	ASSEMBLY FRONT PANEL, CBS-2100 GRAVITY VERSION
30	4	1082.00058.00	SCREW, # 8-32 X 5/8, FLAT HD, PH, 18-8 SS
31	2	1102.00182.00	ASSEMBLY, LOCATOR CBS-2130
32	2	1082.00065.00	SCREW #8-32 X 1 1/2", FLAT HD PH, 18-8 SS
33	2	1023.00159.00	CORNER INSERT
34	1	1001.00127.00	COVER, TOP CBS-2132 AND 2142
35	1	1001.00128.00	COVER, UPPER BASE, CBS-2132 AND 2142
36	1	1402.00037.00	HARNESS, HIGH AMP, CBS-2132 GRAVITY
37	1	1402.00038.00	HARNESS, LOW AMP, CBS-2132 GRAVITY
38	2	B014218B2	BREW BASKET ASS'Y.,POLY, Ø.218, CBS-2100's, BLK. PLUG
38	2	B012218B1	Brewbasket ass'y., Optional, Ø.218, CBS-2100's Stainless Steel
39	1	1083.00009.00	WASHER, #6 SCREW, INTL TOOTH LOCKWASHER
40	1	1084.00010.00	NUT, HEX, #6-32, UNDERSIZED, ZINC PLATED
41	2	1025.00078.00	TUBE, 5/16 OD x 3/16 ID x 14.00 LG.
42	3	1023.00163.00	LEG BODY, CBS-2130
43	3	1083.00021.00	WASHER, 1/4" SCREW SIZE, SPRING LOCK
44	3	1112.00158.00	WELDMENT, LEG ROD, CBS-2130
45	3	1021.00017.00	LEG INSERT THREADED, CBS-2130
46	1	1046.00006.00	LABEL, WARNING, "HOT WATER FAUCET"
47	2	1046.00003.00	LABEL, CSD WARNING, 1.5" X 5.0"
48	2	1025.00076.00	TUBE, 5/8 OD x 3/8 ID x 3.75 LG.
49	2	1025.00076.00	CLAMP, HOSE, SIZE "G" NYLON
49		1000.00002.00	OLAIVII , HOSE, SIZE & INTLOIN

1102.0020	3.00	S	pray Housing	Assembly Parts CBS-2130XTS
	Ref	QTY	PART NO	DESCRIPTION
	1	1	1102.00020.00	SPRAY HOUSING ASSY CSD DESIGN
	2	1	1024.00002.00	ORING, AS568A-019, BUNA-N
8	3	1	1102.00019.00	ASSEMBLY, CASCADE SPRAY DOME
	4	1	1023.00189.00	ADAPTER, SPRAY HSG, DSV11 VALVE
6	5	2	1082.00068.00	SCREW, M3.9x13, CHEESE PH., T/FORM, Z/P
5	6	1	1057.00038.00	DIAPHRAGM, VALVE DSV-11
4	7	1	1057.00050.00	SPACER PLATE DSV11, -1 OPTION
	8	1	1057.00040.00	PLUNGER, DISPENSE VALVE 24VDC
	9	1	1057.00051.00	SPRING, DISPENSE VALVE 24VDC
	10	1	1057.00022.00	DSV11 COIL AND FRAME ASSEMBLY, 24VDC
3	11	4	1082.00076.00	SCREW, #6-20 X 1/2", THRD FORM, P/H PHIL



1023.00190.00 RED PLUG, BB HANDLE

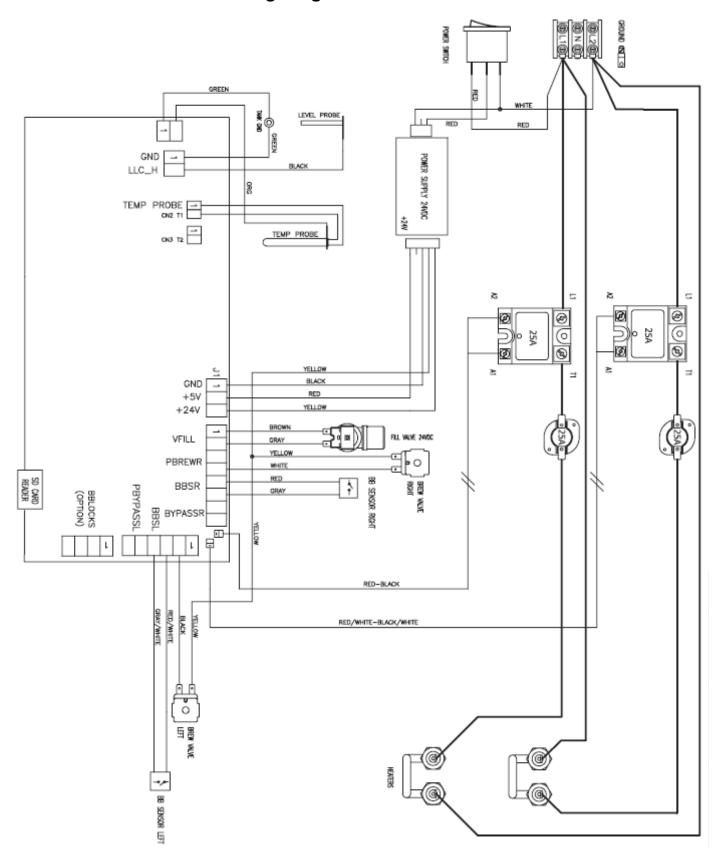
1023.00191.00 GREEN PLUG, BB HANDLE

**1023.00192.00 ORANGE PLUG, BB HANDLE** 

1023.00194.00 BLACK PLUG, BB HANDLE

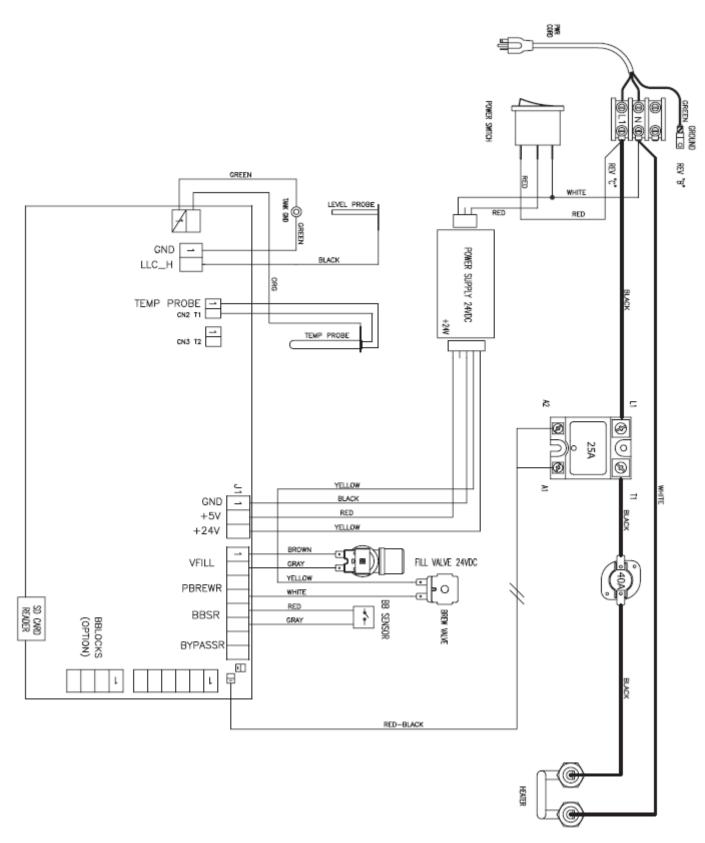
OPTI	ONAI	L CBS-2100 Se	ries Stainless Steel Brew Basket, 13" X 5", Part # B012218B1 (SQUARE)
Ref#	Qty	Part Number	Description
1	1	1112.00128.00	BB WLDMNT, 13"X5", W/ Ø5.5MM (.218) HOLE
2	1	1102.00064.00	HANDLE W/MAGNET ASSEMBLY, BLACK RUBBER
3	1	1082.00040.00	SCREW, 1/4-20 X .5, FL HD, PH., W/NYLON
4	1		BASKET, WIRE, 13" X 5", CBS-2040'S
5	1	1046.00025.00	LABEL, BREW BASKET WARNING
ļ	brewb	r strike or hit a pasket against ard surface	

## Wiring Diagrams-North America



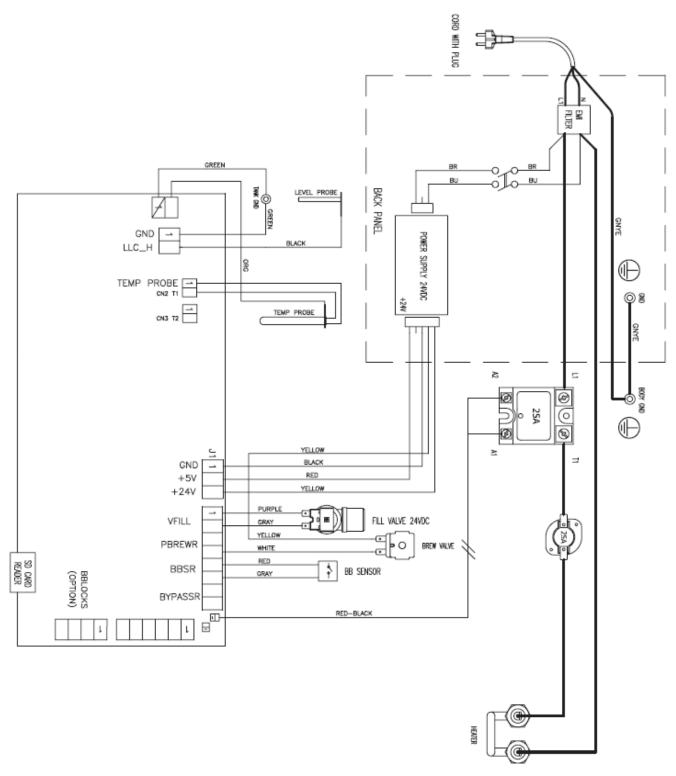
Drawing 1401.00050.00

**CBS-2132XTS Wiring - North America** 

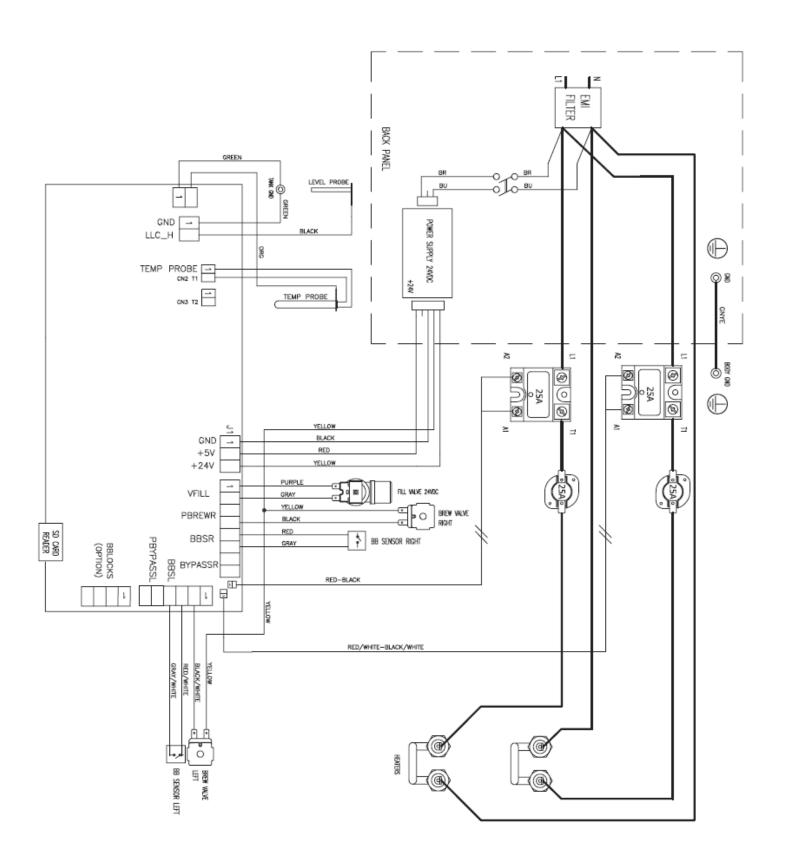


Drawing 1401.00051.00 CBS-2131XTS Wiring- North America

## **CE Wiring Diagrams**



Drawing 1401.00052.00 CBS-2131XTS Wiring-CE



Drawing 1401.00054.00

**CBS-2132XTS Wiring-CE**