FETCO User's Guide and Operator Instructions www.fetco.com

FETCO Extractor Touch Screen Models: CBS-2100XTS





CBS-2141XTS with 1 gallon Luxus dispenser

CBS-2142XTS with 1 gallon Luxus dispensers (Dispensers not included)

Two Part User Guide FETCO Extractor Touch Screen Models: CBS-2100XTS

Extractor Touch Screen Commercial Hot Beverage Equipment



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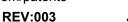
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Instructions for brew operation-fast brew

Setup is simple

1-Connect unit to water and electrical utilities

See instructions

2-Turn unit "ON" to fill and heat

The "READY" icon will display "Ready To Brew" with factory set defaults

3-Add paper and ground coffee to brew basket

The Specialty Coffee Association of America® (SCAA) guidelines are 55grams per liter

Place appropriately sized, clean, empty and preheated dispenser under brewbasket.

5-Touch and briefly hold finger on screen as shown below to start brew

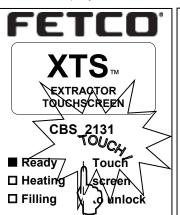
-Note: "READY" icon is satisfied

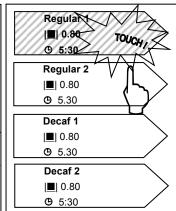
Factory setting total brew time is five minutes-thirty seconds. Brew time is four minutes with one and a half minute drip delay. Drip delay allows the brew basket to completely empty the brewed coffee

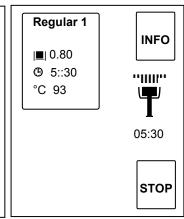
Brew operation is simple. The intuitive touch screen-STARTS THE BREW

CBS-2141XTS single side brewer is displayed. Screen shown approximately the same size as on equipment







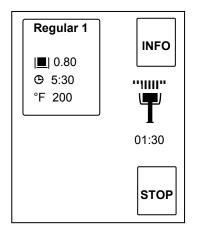


1) With ready icon displayed

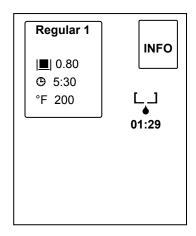
activate brew menu

2) Hold finger on screen to 3) Touch and hold pennant to start brew

4) Brew Started



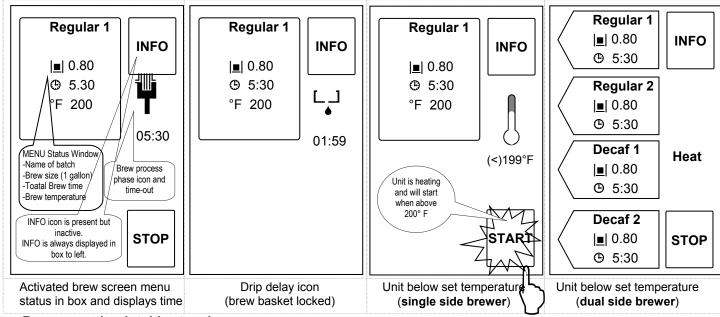
5) Brew has completed, Drip delay sequence will start. Brew is still active



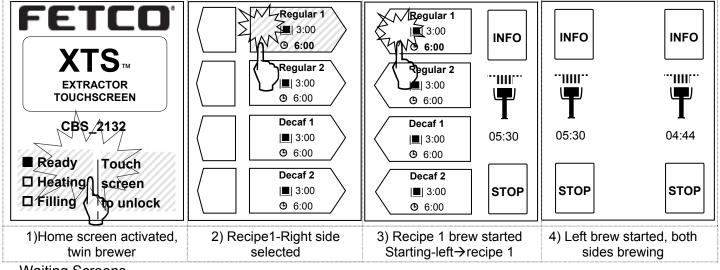
Drip delay icon (brew basket locked)



Return to home screen



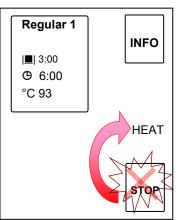
Brew operation-intuitive touch screen- When brew is started-the equipment displays the brew process graphically as shown Screens for dual brewer. CBS-2132XTS shown



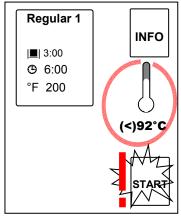
Waiting Screens



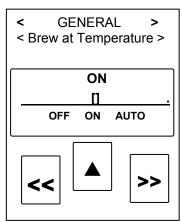
1) Hot water tank temp too 2) Brew at Temperature low. Brew cannot start. Note the :READY" icon is off & the "HEATING" icon is on. Brewer in "Automatic" temperature



feature is set to "AUTO" and hot water tank temperature is too low. Brew will start when tank is at set-point.



3) Brew at Temperature feature is "OFF"" and hot water tank temperature is below set point. Pressing "START" will begin brew at low water temperature!



4) Programming screen for "Brew at Temperature" Unit is set by FETCO for "ON. "OFF and "AUTO" settings are not recommended

Service & Programming

Menu adjustments, name selection, programming, error codes, counters are accessed by activating touch screens.

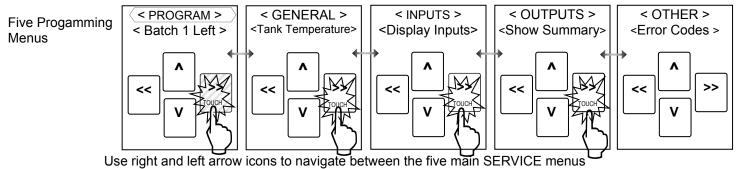
To access the General Service Menu

PROGRAM, GENERAL, INPUTS, OUTPUTS, and OTHER (Service Menu).

- →Enter Service Menu by accessing the power switch on back of the panel
- 1)-Switch power "OFF" with power switch located on rear of brewer
- 2)-After at least ten seconds: Turn power switch "ON"
- 3)-Quickly touch and hold the XTS screen to enter the programming screens as shown below
- 4)-When entering The SERVICE MENU: the first screen in the group is "PROGRAM"
- 5)-Use right and left arrow icons to navigate through the five main SERVICE menu groups.
- 6)-The DOWN arrow navigation icon will open the FEATURE icon below.
- 6a)-Navigate through the Menu Item with the arrows, edit any if needed
- 6b)-When finished editing—press the UP arrow to go back through the menu items to save changes and exit
- 7)-The chart on the next page give the general service menu topics, the pages following list the details of the topics
- →When navigating up to "EXIT" leaves the Service Menu Screens and SAVES your settings on exiting.

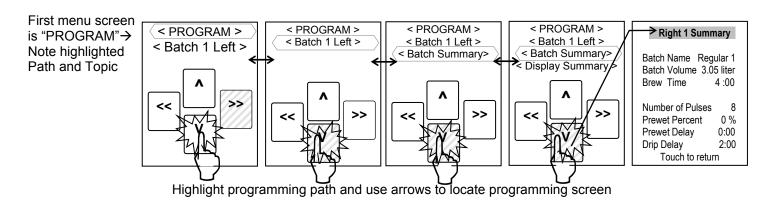
The Menu Chart on the next page shows the main categories of the five SERVICE menus

When SERVICE MENU is entered—the first selection is "PROGAMMING Mode" Scroll through the five programming categories using the right and left arrow icons.

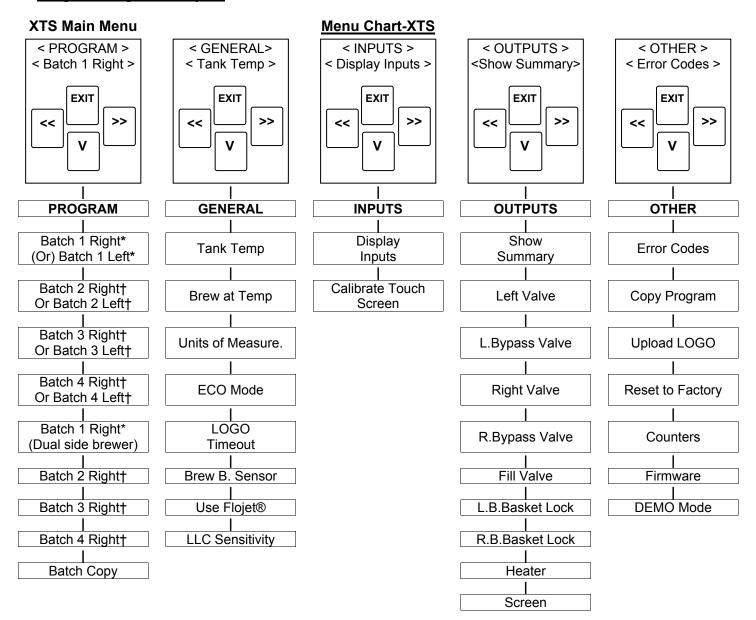


Navigating PROGRAMMING MENUES

Highlight desired menu path and location and use arrow icons to navigate service menu screens. HIGHLIGHT



Programming menu layout



Menu Features: Batch Parameters

PROGRAM	Programming Items	Factory set Default	Programming Range	Notes
Batch 1 LEFT*	Batch Summary	Display Summary	Entire recipe display	Example at bottom of column
Models CBS-2130, CBS-	Batch Name	Regular 1(-16)	Choose from list: Regular1	(Regular 1-16) -OR- Write: any name Screen will display in range
2140, CBS-2150 & CBS- 2160XTS-	Batch Volume	0.80 to 3:00 gal	3L/1gal -3.00 gal 0.25-0.5gal 1.25-3.10gal	and units selected CBS-2160XTS is 3:00 gal
	Brew Time	4:00mm:ss [2:00-10.00]	4:00 mm:ss 2:00-4.00 min 10:00	CBS-2160XTS 4:30 min
	Nr Of Pulses	8	8 1 30	CBS-2160 has minimum of 2 pulses
	Prewet Perc.	0%	0 %	
Pause after prewet completes	Prewet Delay	0%	0:00 mm:ss _[] 0:00 1:00	This feature appears ONLY if Prewet >0:00
	Bypass Perc.	0%	0 %	
This is a Safety Feature	Drip Delay	1:30 mm:ss 2:00 mm:ss for CBS-2160	1:30 mm:ss L[]	Time that brew basket remains locked during final drip-out
Batch 2 Left**	**[Batch 2-4-Righ	t and Batch2-4-Left]	may be individually se	elected-or-entirely deleted
	Batch ON/OFF	ON	ON ON OFF	This feature is only on 2-4 Batch 1 cannot be turned off
	Batch Name	Regular 1(-16)	Choose from list: Regular1	(Regular 1-16) -OR- Write: any name
Models CBS-2130, CBS-2140, CBS-2150 & CBS-2160XTS-	Batch Volume	0.80 to 3:00 gal	3L/1gal -3.00 gal 0.25-0.5gal 1.25-3.10gal	Screen will display in range and units selected CBS-2160XTS is 3:00 gal
	Brew Time	4:00mm:ss [2:00-10.00]	4:00 mm:ss [] 2:00-4.00 min 10:00	CBS-2160XTS 4:30 min
	Nr Of Pulses	8	8 1 30	CBS-2160 has minimum of 2 pulses
	Prewet Perc.	0%	0 %	
Pause after prewet completes	Prewet Delay	0%	0:00 mm:ss	This feature appears ONLY if Prewet >0:00
	Bypass Perc.	0%	0 %	
This is a Safety Feature	Drip Delay	1:30 mm:ss 2:00 mm:ss for CBS-2160	1:30 mm:ss [] 0:30 5:00	Time brew basket remains locked during drip-out
Batch 3 Left **	(See Batch 2-Left)			Batch 1 Right
Batch 4 Left **	(See Batch 2-Left)			Batch Name Regular 1
Batch 1 Right *	(See Batch 1-Left)			Batch Volume 3.00 gal
Batch 2 Right **	(See Batch 2-Left)			Brew Time 4:00
Batch 3 Right ** Batch 4 Right **	(See Batch 2-Left) (See Batch 2-Left)			
Batch Copy	Copy From Batch	L1	L1-L4;R1-R4	Number of Pulses 8
	Copy To Batch	L1	L1-L4;R1-R4	Prewet Percent 0 %
	Copy?	L1→L2? (example)	NO I I VES NO	Prewet Delay 0:00 Drip Delay 1:30
*Batch 1 RIGHT Side & Ba *Batch 1 cannot be disable	Touch to return (Example screen for Batch Summary display)			

GENERAL	Programming Items	Factory set Default	Programming Range	Notes
	Tank Temp.	<u>200°F</u>	[200 °F] 77C/170F 97C/207F	Chart to correct for high altitude below
"OFF" allows brewing at any temperature.	Brew at Temp.	"ON"	ON OFF ON AUTO	SEE NOTE BELOW!
	 Units of Meas. Temperature	°C or °F	°F °F °C	[Switchable Units]
	• Volume	Gallons [Liters]	Gallons [] Gallons Liters	[Switchable Units]
Energy Saving Mode	ECO Mode	OFF	ECO Mode ON OFF	If Selected: After 1 hour of inactivity→Lowers hot water tank temperature to 170°F
	Logo Timeout	0:15 mm:ss	0:15 mm:ss 0:15 5:00	
This is a Safety Feature	Brew B. Sensor	NORMAL (SEE WARNINGS)	NORMAL NORMAL OVERRIDE	Factory or service use for servicing. "NORMAL" is recommended for safety.
	Use Flowjet	NO	NO NO YES	Trims water handling system for Flowjet
"NORMAL" for most water "HIGH" for R.O.	LLC Sensitivity	NORMAL	NORMAL II NORMAL HIGH	Liquid level control sensitivity. High is for reverse osmosis water or very pure water.

BREW AT TEMPERATURE DEFINITONS

BREW AT TEMP: "ON"

(DEFAULT: FACTORY PROGRAMMED INTO BREWER)

"BREW START" Batch Section Pennants will not be accessible until tank temperature is at set point.

The "BREW START" screens with the Batch Section Pennants become accessible when hot water tank is at the selected temperature. A screen (example to the right) will display and show "BREW AT TEMP" is selected. →

BREW AT TEMP: AUTO USER SELECTABLE

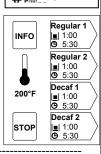
"BREW START" will pause if the hot water tank is not at the selected temperature—and automatically start when it is at the set temperature.

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 brewer when in the BREW AT TEMP mode

BREW AT TEMP: OFF USER SELECTABLE (Not recommended)

Allows brewing at any temperature above 170°F/82°C.





[ft]	[m]	Suggested Setting[°F]	Boiling point[°F]	Suggested Setting[°C]	Boiling point [°C]
0	0	205	212.0	96	100.0
500	152	205	211.0	96	99.5
1000	305	200	210.1	93	98.9
2000	610	200	208.1	93	97.8
2500	762	200	207.2	93	97.3
3000	914	200	206.2	93	96.8
3500	1067	197	205.3	92	96.3
4000	1219	195	204.3	91	95.7
4500	1372	194	203.4	90	95.2
5000	1524	194	202.4	90	94.7
5500	1676	193	201.5	89	94.2
6000	1829	192	200.6	89	93.6
6500	1981	191	199.6	88	93.1
7000	2134	190	198.7	87	92.6
7500	2286	188	197.8	86	92.1
8000	2438	187	196.9	86	91.6
8500	2591	185	196.0	85	91.1

Chart to correct for altitude for boiling point

in tank water temperature.

ECO MODE-Energy saving mode DEFINITONS

If Selected: Turns heaters off after 1 hour of inactivity.

The hot water tank temperature will slowly decline to no lower than 60°C/170°F A screen (example to the right) will display showing "ECO Mode" is activated. →

To return from ECO-Mode

Tap the screen, ECO Mode turns off, and the brewer will heat to set temperature.

It takes approximately 7-15 minutes to return from 60°C/170°F to factory default 93°C/200°F

All FETCO commercial hot beverage equipment have well insulated hot water tanks and have engineered mechanical features to limit energy consumption.

Effective construction and insulation increases equipment life and lowers building HVAC costs. FETCO hot beverage equipment have the best energy savings of all major suppliers.



INPUTS	Programming Items	Factory set Default	Programming Range (display)	Notes
Display Inputs	• Input Summery		R. Brew Basket Sens. L. Brew Basket Sens. H. Liquid Level probe L. Liquid Level probe Tank Temperature Probe SD Card Recognized Tank Temp. 93°C	
Cal. Touch Scr		Calibrate	Calibrate	If <u>Yes:</u> Follow directions on the touch screen

INPUT SUMMARY SCREEN				
	Brew Basket Sensor■			
Display Inputs (See "INPUTS" Service Screen)	High Liquid Level Probe□			
	Low Liquid Level Probe■			
	Tank Temp. Probe■			
	SD Card present□			
	Tank Temperature ^{93C}			
LL DIODLY NIDUTO				

Use DISPLY INPUTS screen to assist in error code fault correction. There are two liquid level probes shown as High and Low High is the fill volume of the hot water tank Low probe is the level when the heaters are sufficiently covered by water to start.

OUTPUTS	Programming Items	Factory set Default	Programming Range (display)	Notes
Show Summary	Output Summary		Left Brew FR 3200 Left Bypass FR 2400 Right Brew FR 3200 Right Bypass FR 2400 Screen Contrast 8 Screen Brightness 8 Touch To Return	FR=Flow Rate ml/min
Left Valve Test OR Calibrate	• Left Valve Test	(Press to test)	TEST Press To Test TEST	Runs valve to verify flow. Have container under brew-basket!
""	• L. Valve Calib	Calibrate *Flow Rate	1540 to 3200 ml p m 1400-2800 1950-3800	Factory or service use for flow rate adjustment
L. Bypass Valve Test OR Calibrate If bypass option availble	Left Bypass Valve Test	(Press to test)	TEST Press To Test TEST	Runs valve to verify flow. Have container under brew-basket!
,, ,, ,,	• L. Bypass Valve Calib	Calibrate *Flow Rate	2150 to 2400 ml p m 1900-2100 2800	Factory or service use for flow rate adjustment
Left Valve disp	lay is only for CBS-210	2XTS dual side brewer.	CBS-2101XTS Single series displa	ys RIGHT SIDE only
Right Valve Test OR Calibrate	Right Valve Test	(Press to test)	TEST Press To Test TEST	Runs Valve to verify flow. Have container under brew-basket!
,, ,, ,,	R. Valve Calib	Calibrate *Flow Rate	1540 to 3200 ml p m l 1400-2800 1950-3800	Factory or service use for flow rate
R. Bypass Valve Test OR Calibrate If bypass option availble	Right Bypass Valve Test	(Press to test)	TEST Press To Test TEST	Runs valve to verify flow. Have container under brew-basket!
,, ,, ,, ,,	R. Bypass Valve Calib	Calibrate *Flow Rate	2150 to 2400 ml p m 1900-2100 2800	Factory or service use for flow rate adjustment
Fill Valve	• Fill Valve Test	(Press to test)	TEST Press To Test TEST	Operates fill valve. Have container under both brew-baskets!
Left Basket Lk. Not on CBS 2130XTS	Left brew basket lock test	(Press to test)	TEST Press To Test TEST	Energizes brew basket lock. For factory or service use
Right Basket Lk. Not on CBS 2130XTS	Right brew basket lock test	(Press to test)	TEST Press To Test	Energizes brew basket lock. For factory or service use
Heater	Heater Test	(Press to test)	TEST Press To Test TEST	Energizes Heater(s) Service use only.
Screen Brightness OR Contrast	Screen Contrast	Contrast	8 1 10	
	S. Brightness	Brightness	8 10 10	

		Brew Valve and Bypa					
See "OUTPUTS" right and left brew valve and bypass valve settings and calibration							
CBS-2152 & CBS-2162	<u>2 ml/min</u>	CBS-2151& CBS-2161	<u>ml/min</u>				
Left Brew FR	3200	Right Brew FR	3200				
Left Bypass FR	2400	Right Bypass FR	2400				
Right Brew FR	3200	5					
Right Bypass FR	2400						
CBS-2132& CBS-2142	ml/min	CBS-2131&CBS-2141	ml/min				
Left Brew FR	1540	Right Brew FR*	1540				
Left Bypass FR*	2150	Right Bypass F	R*				
2150		3 - 71					
Right Brew FR*	1540						
Right Bypass FR	2150						

How to calibrate the flow rate

Set the flow rates of components to adjust for taste profile and for over or under potting. Built-in algorithms in Brewer controller software corrects brew parameter to customer preferences or to trim variations in flow control components NOTICE: This operation requires operator hold finger on keypad position for one minute—without lifting it.

1) MEASURE THE FLOW RATE:

It is very important to calibrate a heated brewer, preferably a brewer that has been used for brewing.

- -Enter programming mode, scroll left to "OUTPUTS"
- -Scroll down to "Left(or)Right Valve Test"
- -Place 5 liter/2gal measuring container under empty brew-basket.
- One good way to measure is to weigh the test water. Use a scale for at least 5 kg/12lb
- -Press To Test the Brew Valve. →! Keep finger on touchpad for one minute! !!DO NOT STOP!! It is very important for this test to keep finger in place for the entire minute.

After one minute [1 min.]-calibration dispense will stop automatically.

Measure the results of the flow in the 5-liter measuring container and hold the number.

2) AUTOMATIC Built-in CALIBRATE THE FLOW RATE

- -Enter this number, in milliliters, into the calibration slider for the Valve tested in the OUTPUT MENU.
- -Use milliliters. If measured in fluid ounces (fl.oz) multiply by 29.57 to convert to milliliters
- -After entering the measured volume, exit PROGRAMMING and return to the normal screens

3) MANUAL METHOD Operator input: CALIBRATE THE FLOW RATE

Use the amount measured, in milliliters, divided by programmed value and multiply by the current setting

3200 ml p m*	← Example of	Actual Volume	v	CURRENT		NEW	Enter new setting on the
 2800 3800	CBS-2160 brew valve slider	Programmed Volume	X	SETTING	=	SETTING	slider shown and EXIT to save

*Current valve flow setting in milliliters per minute [mlpm] as shown in the value above slider in <u>OUTPUT</u> Flow Rate box-Obtain programmed volume from "PROGRAM" Menu under "Batch Summary".

Note—match correct batch number to correct side, if two sided.

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

Default-factory	set Flow Rates;	Brew Valve and Bypa	ISS
See "OUTPUTS" right and	d left brew valve and	bypass valve settings and	calibration
CBS-2162	ml/min	CBS-2161	ml/min
Left Brew FR	3200	Right Brew FR	3200
Left Bypass FR	2400	Right Bypass FR	2400
Right Brew FR	3200		
Right Bypass FR	2400		
CBS-2152	ml/min	CBS-2151	ml/min
Left Brew FR	3200	Right Brew FR	3200
Left Bypass FR	2400	Right Bypass FR	2400
Right Brew FR	3200		
Right Bypass FR	2400		
CBS-2142	ml/min	CBS-2141	ml/min
Left Brew FR	1540	Right Brew FR	1540
Left Bypass FR	2150	Right Bypass FR	2150
Right Brew FR	1540		
Right Bypass FR	2150		
		not have the BYPASSS	
CBS-2132	ml/min	CBS-2131	ml/min
Left Brew FR	1540	Right Brew FR	1540
Right Brew FR	1540		

OTHER	Programming Items	Factory set Default	Programming Range (display)	Notes
Error Codes	Display Errors	(Codes)	1: 2: 3:	See Error Code Chart for references
	Reset Errors	(Reset)	Reset	Factory and Service use only. Do Not Reset
			then "ON". Do not reset the err	
error codes silou	lu be after completi	ing the service and	SD→ Brewer	Setup upload
Copy Program	• From SD to B.	SD→ Brewer	YES NO	Please insert SD card with the setup data!
	• From B to SD	Brewer→ SD	Brewer→ SD II YES NO	Setup download Please insert an empty SD card with sufficient space (≤2GB). SD card must be clear of files
Upload Logo		Upload Logo	UPLOAD LOGO Are you sure YES NO	Please insert SD card with logo file!
Res to Factory & Select Brewer Type	See next line: "Select Brewer Configuration"	Reset to default	Reset to Default Are you sure YES NO	Completely overwrites all user setup, incl. user logo.
Select Brewer Configuration	CBS_2131 3L; CBS_2131 1G CBS_2132 3L; CBS_2132 1G CBS_2141; CBS_2142 CBS_2151; CBS_2152 &2152-2G CBS_2161; CBS_2162	Screen appears after pressing "Res to Factory" [Above]	Select Model CBS [2131-2152]Series	Scroll to your brewer and tap ENTER tab
Counters	Display Counters -OR- Display Resettable Counters	Counters Display Total Counters	Left Brews 0 Left Brew activated 0 Left Brew [litr] 0 Left Bypass activated 0 Left Bypass [litr] 0 Right Brews 0 Right Brew activated 0 Right Brew activated 0 Right Bypass activated 0 Right Bypass activated 0 Right Bypass [litr] 0 Right Bypass [litr] 0 Right Bypass [litr] 0 Right Bypass activated 0 Right Bypass [litr] 0 Fill valve Activated 0 Fill Valve [litr] 0 Heater Activated 0 Heater "ON" time 0:00 Touch To Return	Identical screen for Resettable Counters Will display when selected. See next line to reset to zero NOTE: "Total Counters" is not user resettable See table, next page, for counter screen, definitions
Reset Counters	Resets Counters	Reset All Counters	Reset All Counters Are you sure YES NO	Resetting will restart counter from zero
Firmware	Firmware Version -Software type	Display Firmware Version	CBS_2132 [or model type]	Displays firmware version
	Update Firmware	UPDATE	UPDATE YES NO	Firmware upload Please insert SD card with the firmware file!
DEMO Mode	DEMO ON/OFF		OFF ON OFF	Demonstrates the controls for training. Disables all components in demo mode.

COUNTER Screen, Definition		
Total brews on left side	Left Brews	13
Actual brews on left side	Left Brew activated	13
Total volume produced by left side brewer	Left Brew [litr]	39
Actual Bypass used on left side	Left Bypass activated	0
Total volume of left bypass	Left Bypass [litr]	0
Total brews on right side	Right Brews	41
Actual brews on right side	Right Brew activated	41
Total volume produced by right side brewer	Right Brew [litr]	0
Actual Bypass used on right side	Right Bypass activated	0
Total volume of right bypass	Right Bypass [litr]	0
Total cycles activated by fill valve	Fill valve Activated	0
Total cycles activated by fill valve	Fill Valve [litr]	0
Total heater cycles activated	Heater Activated	0
Total time heater has been energized	Heater "ON" time	0:00
	Touch To Return	

		Error	Codes	
→Con	tact specialized personnel fo	r error codes		
Code	Description	Possible Cause	Corrective Action	How to Clear Error Codes
001	Software error-error on start up or corrupted software	Improper start-up or shutdown	Restart , if still fault: reload software	
050	Short-circuit in temperature probe	Probe failure.	Replace probe.	TO CLEAR FAULT, Make repairs as required
051	Open temperature probe.	Bad probe connection, or probe failure.	Check all connections. Replace probe if necessary.	Below is the only way to clear error codes:
100	Initial Fill Error. Initial fill time was more than 11 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)	1) Enter "PROGRAMMING" 2)Scroll left to "OTHER"
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)	3)Scroll down to "ERROR CODES"
102	Unwanted fill;	Possible leak in tank, fitting, or valve.	Occurs during pre-fill, low probe is uncovered	4)Scroll down to "Display Errors"
107	Fault Lower liquid level probe	Tank not filling	Occurs during pre-fill, low probe is uncovered, or wires are reversed low / high probe	5)Scroll left to "Reset Errors" 6)Scroll down to "Reset"
201	Heater open, high limit thermostat, or Solid State Relay (SSR) fault	Failure of: heating element, SSR, high Limit or low voltage	Check and replace heating elements if necessary.	7)Follow directions shown on screen.
255	Touch pad error	Usually from longer than 2 min contact. Or faulty reassembly after service	Restart , if still fault: reload software. If mechanical: reassemble correctly	Merely toggling ON/OFF switch will not clear error codes.
	INSERT BREW BASKET	Brew basket must be in place This is a SAFETY FEATURE	Insert brew basket into brewer rails to enable brewer	Error codes must be cleared by correcting the fault and entering PROGRAMMING and using the menus!

^{! →} Never attempt to defeat or override a brew basket-locking feature-this is a safety feature

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:

- 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

- 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

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.
- 4. 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
- 6. Do not electrically energize this equipment or attempt operation without all covers in place and all screws fastened.
- Unplug machine before disassembly or servicing.

Safety Notes

- 1. Professional installation is required. This appliance is manufactured only for commercial use
- 2. Operational 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.
- 4. 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 adult trained personnel.
- 5. Do not attempt to move hot beverage equipment once it is filled. Drain equipment before moving.
- 6. FETCO commercial coffee brewers prepare large amounts of coffee or tea in a single batch using very hot water
- 7. Commercial coffee brewers provides very hot water from the sprayhead, brewbasket and faucet when it is pulled.
- 8. Coffee brewers may continue to dispense very hot water from the mechanically operated faucet after the electronic touchpad is completely disabled by turning off the power switch on the lower back of the unit, or unplugging the unit.
- 9. For safety, the brewer control locks the brew basket for 5.5 minutes after starting the brew.
- 10. Never attempt to defeat the factory set (default) time that the brew basket is locked for safety from start of brew.

Keep these instructions for training and future reference.

	End of section notes								End	ofs	secti	on n	otes									
N																						



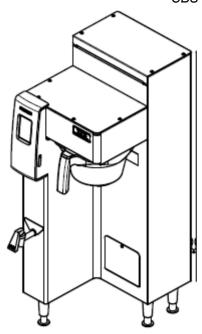
Installation and Service Guide

For Qualified Service Technicians Only

Models: CBS-2141XTS & CBS-2142XTS

Extractor Touch Screen Commercial Hot Beverage Equipment

One gallon dispenser series: CBS-2141XTS CBS-2142XTS



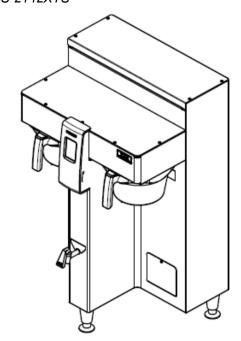


Table of Contents: Installation and Service Guide Section—Reserved for qualified service technicians

Specifications and Requirements2	Service Guide to a Successful Installation4
Electrical Configurations3	Parts diagrams7
CBS-2140XTS Dimensions & Utility Connections 2	Wiring diagrams18

Contact Information

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techsupport@fetco.com

P130 part B REV003 July 2019

Specifications and Requirements

Water Requirements:

CBS-2140XTS: 20-75 psig, (138-517kPa) 1½gpm/(5.7lpm)

Water inlet fitting is a 3/8 inch male flare.

Water supplied to hot beverage equipment should be filtered

Water supplied Hardness >100 TDS (5.5 grain)

Inlet Water Temperature: Cold supply **Total Brew Cycle** Factory setting:

5.5 minutes=[4 minute brew time + 1.5 minute drip delay]

Coffee Filter Size:

13" X 5"" - standard FETCO # F002

Temperature, as set by factory:

200°F (93°C) inside water tank (at sea level)

195°F (91°C) ± 5° at sprayhead

Brew Volume:

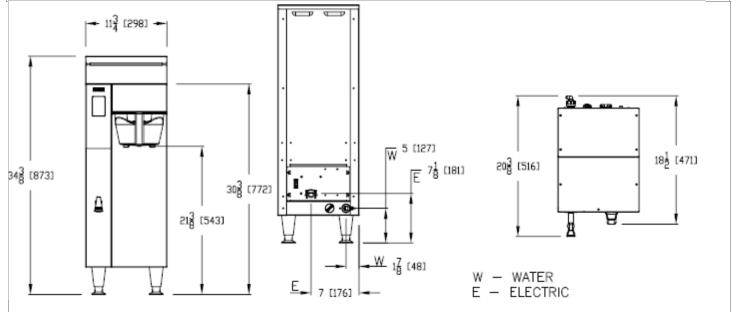
Full Batch Up to 1 gallon/3.8 liters per brew

Technical Data—CBS-2140XTS 1 gallon single and dual brewers

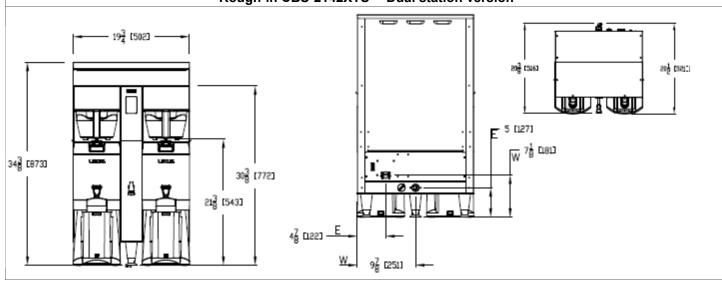
Dimensions, Utility Connections Capacities, and Measurements

Brewer	Height	Width	Depth	Empty Weight	Filled Weight	Total Weight- Brewer & Full Dispenser	Hot Water Tank Capacity	Shipping Weight	Shipping Dimensions
CBS-2141XTS Single-1 gallon	34 ¾" 873mm	11 ¾" 298mm	20 ¾" 518mm	29lb 13.2kg	55 lb 25 kg	66.2lb 34.6 kg	3.3 gal 12.4 l	41 lb 18.6 kg	16" x 23" x 29" 406 x584x737mm
CBS-2142XTS	34 %"	19 ¾"	20 %"	47lb	92lb	114.4lb	5.8 gal	58lb	23"x 25" x 29"
Dual-1 gallon	873mm	502mm	518mm	21.3kg	41.7kg	51.9 kg	22.1 I	26.3kg	584x635x737mm

Rough-in CBS-2141XTS —Single station version



Rough-in CBS-2142XTS —Dual station version



Electrical C	onfiguration	ıs							
CBS-2141	XTS—Single	Field configu	ırable,	Unive	rsal Voltage				
Configuration Codes	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	Max. KW	Amp Draw	Brew-Volume/Hour (3 liters per batch)	
E214171	1 X 1.5 kW	120	1	2+G	NEMA 5-15P	1.6	13.0	3.9 gal/14.8 liter	
(*Optional)	2 X 1.5 kW	(120/208-240)	1	(3+G)	Terminal Block	3.1	13.0	5.8 gal/22 liter	
E214172	1 X 1.7 kW	120	1	2+G	NEMA 5-15P	1.8	14.7	4.4 gal/16.7 liter	
(*Optional)	2 X 1.7 kW	(120/208-240)	1	(3+G)	Terminal Block	3.5	14.7	8.7 gal/33 liter	
E214173	1 X 2.3 kW	120/208-240)	1	2+G	NEMA 5-20P	2.4	19.7		
	2 X 2.3 kW	(120/208-240)	1 1	(3+G)	Terminal Block	4.7	19.7	5.8 gal/22 liter 11.0gal/41.6 liter	
(*Optional) 2 X 2.3 kW (120/208-240) 1 (3+G) Terminal Block 4.7 19.7 11.0gal/41.6 liter *Sold with factory cord & plug for 120 Volt configuration. Optional user connection to a terminal block requiring L1, L2, N and ground to120/208-240 VAC									
					ration requires three wi				
		International			·	<u> </u>			
Configuration Codes	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	Max. KW	Amp Draw	Brew-Volume/Hour (4 liters per batch)	
E214194	1 X 2.3 kW	200 - 240	1	2+G	Terminal Block	2.3	9.8	5.8 gal/22 liters	
E214190	1 X 3.0 kW	200 - 240	1	2+G	Terminal Block	3.1	12.9	7.7 gal/29.1 liters	
E214191	1 X 4.0 kW	200 - 240	1	2+G	Terminal Block	6.1	14.2	9.3 gal/35 liters	
	XTS—Single							1 2 0	
Configuration Codes	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	Max. KW	Amp Draw	Brew-Volume/Hour (4 liters per batch)	
E214180	1 X 3.0 kW	200	1	2+G	Terminal Block	2.2	10.8	7.1 gal/26.5 liters	
E214181	1 X 4.0 kW	200	1	2+G	Terminal Block	2.9	14.2	8.6 gal/32.5 liters	
	XTS—Single	: CE	1						
Configuration	Heater		ы	100	Electrical	Max.	Amp	Brew-Volume/Hour	
Codes	Configuration	Voltage	Phase	Wires	Connection	KW	Draw	(4 liters per batch)	
E214161	1 X 3.0 kW	230	1	L,N,PE	Terminal Block	2.8	12.4	9.7 gal/36.7 liters	
CBS-2142	2XTS—Twin	North Americ	:a						
Configuration	Heater	Voltage	Phase	Wires	Electrical	Max.	Amp	Brew-Volume/Hour	
Code	Configuration		4	2.0	Connection	KW	Draw	(4 liters per batch)	
E214251	2 X 3.0 kW	200-240	1	2+G	Terminal Block	6.1	25.5	14.0 gal/53 liters	
CBS-2142	XTS—Twin	International							
Configuration Codes	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	Max. KW	Amp Draw	Brew-Volume/Hour (4 liters per batch)	
E214290	2 X 2.3 kW	200 - 240	1	2+G	Terminal Block	4.7	19.7	11.5 gal/43.5 liters	
E214291	2X 3.0 kW	200 - 240	1	2+G	Terminal Block	6.1	25.5	14.0 gal/53 liters	
CBS-2142	XTS—Twin	Japan						-	
Configuration Codes	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	Max. KW	Amp Draw	Brew-Volume/Hour (4 liters per batch)	
E214251	2 X 3.0 kW	200-240	1	2+G	Terminal Block	4.2-6.1	10.8	5.5gal/21liters 7.1gal/25liters	
E214281	2 X 4.0 kW	200	1	2+G	Terminal Block	5.7	28.5	17 gal/65 liters	
CBS-2142	XTS—Twin	CE							
Configuration Codes	Heater Configuration	Voltage	Phase	Wires	Electrical Connection	Max. KW	Amp Draw	Brew-Volume/Hour (4 liters per batch)	

230/400

230

2 X 3.0 kW

2 X 3.0 kW

E214261

E214262

12.4

12.4

14.9 gal/56 liters

14.9 gal/56 liters

5.6

5.6

Terminal Block

Terminal Block

2L,N,PE

L,N,PE

2

1

Service Guide to a Successful Installation

(For Qualified Service Technicians Only)

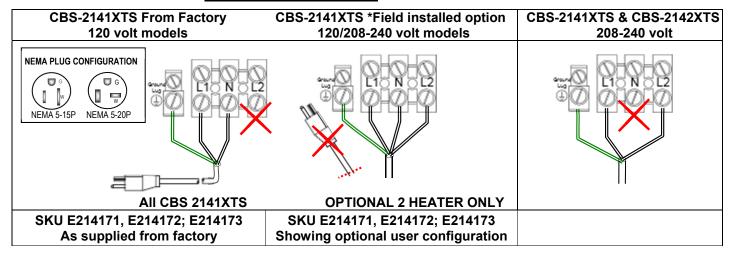
General:

- 1. If not installed correctly by qualified personnel, the brewer will not operate properly and damage may result
- 2. Select and install legs. Leg sets are shipped inside the brew basket
- 3. Some FETCO CBS-2100XTS series equipment have user configurable dispenser locator-see instructions.
- 4. Utilize only qualified beverage equipment service technicians for service and installation.
- 5. Always have an empty dispenser under sprayhead of all coffee brewing equipment-including when at idle
- 6. Damages resulting from improper installation are not covered by the warranty, and will void the warranty. Below are the key points to consider before installation:

Electrical:

- 1. All CBS Series brewers require an electrical ground wire. Installation without grounding is dangerous.
- 2. Note Equipotentiality Terminal, if present, (To identify the terminals which, when connected together, bring the various parts of equipment or of a system to the same potential, not necessarily being the earth (ground) potential, e.g. for local bonding.)
- 3. Verify voltages, polarity, circuits, and circuit breaker access before attaching equipment.
- 4. Brewers in this series wire differently in regards to a nuatral wire. Review the wire diagrams.
- 5. The electrical diagram is located in the Users Guide and online at www.fetco.com.
- 6. Make sure of the tight grounding of the equipment and use the external ground bolt.
- 7. 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.

.SEE WIRING DIAGRAMS AT BACK OF THIS GUIDE



Plumbing:

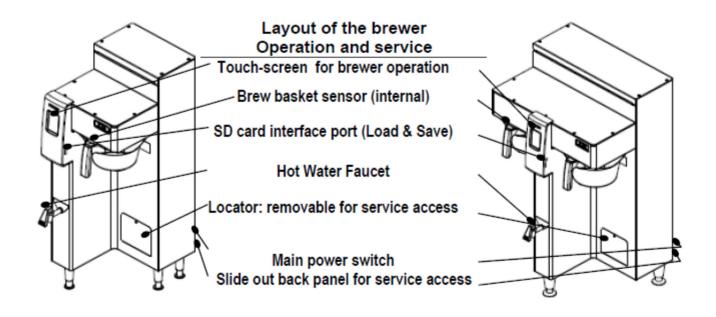
- 1. North America: All installations must comply with applicable federal, state, or local plumbing codes.
- 2. All Others: The water and waste piping and connections shall comply with the International Plumbing Code 2003, International Code Council (ICC), or to the Uniform Plumbing Code 2003 (IAPMO).
- 3. Use an inline water filter for all beverage equipment.
- 4. Install the filter unit after a water shutoff valve and in a position to facilitate filter replacement.
- 5. 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.
- 6. Verify that the water line will provide a flow rate of at least 1½gpm/(5.7lpm) per minute and the water pressure is between 20-75 psig (138-517kPa) before making any connections.
- 7. Use a wrench on the factory fitting when connecting the incoming water line. This will reduce stress on the internal connections and reduce the possibility of leaks developing after the install has been completed
- 8. Install a backflow prevention device. Most municipalities require a recognized backflow preventer.
- 9. Usable on all hot beverage and cold beverage equipment is a WATTS® SD-2 or SD-3.
- 10. WATTS 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.

Tank Drain

The water tank must be drained before maintenance procedures, and when the unit is to be relocated or shipped

- 1. Disconnect power to unit.
- 2. Move the unit near a sink or obtain a container large enough to hold four gallons of water and a hose clamp. Note that the tank may hold more than four gallons and that the drain line will be clamped to empty the container.
- 3. Remove the tank cover and allow the tank to cool to a safe temperature
- 4. The tank drain is located on the back of the unit. Turn the drain plug one-quarter turn in either direction
- 5. Pull the plug out far enough to expose the silicone tube
- 6. Using pliers loosen the hose clamp and move it back over the tube.
- 7. Crimp the tube an inch or two away from the drain plug to prevent water from flowing.
- 8. Use the other hand to pull the drain plug out of the tube.
- 9. Release the crimped tube and allow the water to flow into the sink or container.
- 10. Multiple buckets may be needed during the draining, see tank volumes below.

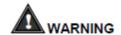
OPEN Leave open for use	Brewer	Hot Water Tank Capacity
Leave open for use	CBS-2141 Single	4.6 gal 17.4 liter
PINCH SHUT To service brewer &drain tank All	 CBS-2142 Twin	8.4 gal 31.7 liter



Installation safety and hygiene directions-For International and CE equipment

- 1. 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.
- 2. For proper operation, this appliance must be installed indoors where the temperature is between 10°C/50°F to 35°C/95°F. Drain and remove all liquid from equipment and lines if exposed to freezing temperatures.
- 3. 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.
- 4. Children should be supervised to ensure that they do not play hot beverage equipment.
- 5. This unit must be installed and serviced by qualified personnel only.
- 6. 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.
- 7. 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.
- 8. 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).
- 9. Place the brewer on the counter or stand. When the brewer is in position, level it front to back as well as side-to-side by adjusting the legs.
- 10. Brewers will need a sturdy supported surface for operation. Do not move brewers when filled.
- 11. Do not tilt appliance more than 10° to insure safe operation.
- 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.

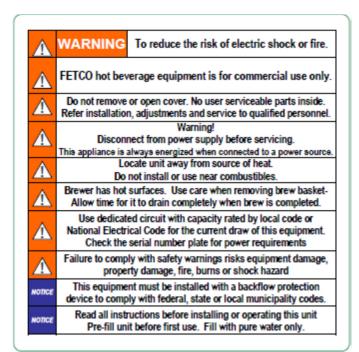
Equipment exposed to flood and contaminated must not be used due to electrical and food safety. Do not operate if unit has been submerged or saturated with water.



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





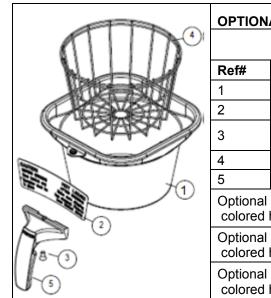
Labels and warnings for hot beverage equipment

For BACK PANEL of equipment (1046.00035.00)

Parts diagrams

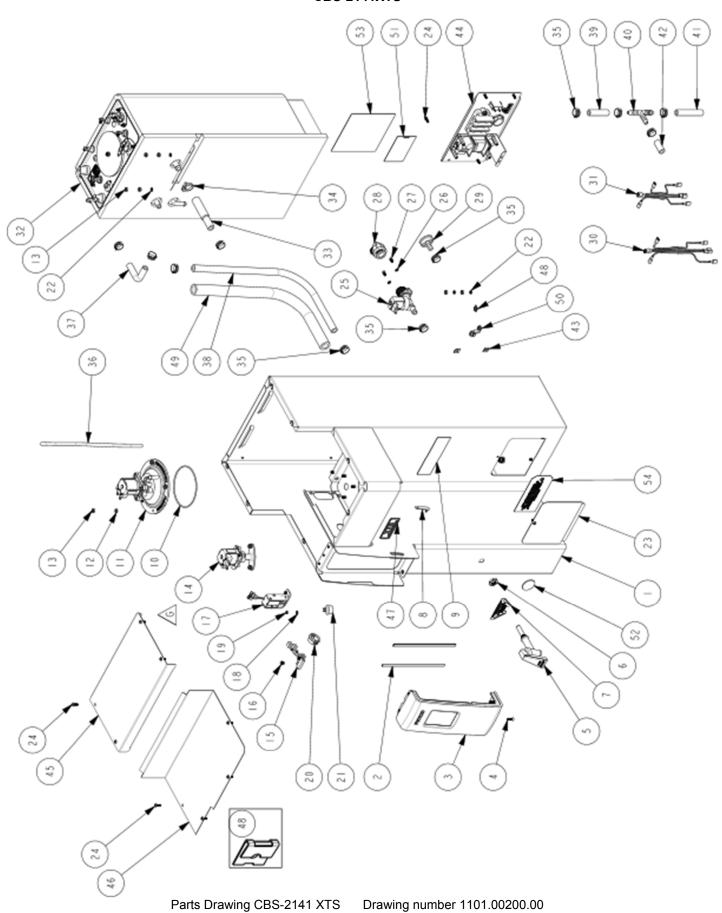
11	02.00203.00			Spray Housing As	sembly Parts	CBS-2140XTS
		R e f.	Q T Y	PART NO	-	DESCRIPTION
		1	1	1102.00203.00		Complete Spray Housing
1 ~		2	1	1102.00019.00		Replacement, Cascade Spray Dome
		3	1		1057.00038.00	VALVE DIAPHRAGM
	9 9	3	1		1057.00252.00	ADAPTER PLATE, SPACER
	1000.00098.00	3	1	#3 Contained in KIT	1057.00040.00	PLUNGER, DISPENSE VALVE 24VDC
	3	3	1	1000.00097.00	1057.00051.00	SPRING, DISPENSE VALVE 24VDC
		3	1		1057.00022.00	COIL AND FRAME ASSEMBLY
		3	4		1082.00076.00	SCREW, #6-20 X 1/2", PHIL
	- 4	4	1		1102.00020.00	SPRAY HOUSING ASSY CSD DESIGN
		4	1	#4 Contained in		O-RING, AS568A-019, BUNA-N
		4	1	KIT	1102.00019.00	ASSEMBLY, CASCADE SPRAY DOME
			1	1000.00096.00	1023.00189.00	SPRAY HOUSING VALVE ADAPTER
		4	2		1082.00068.00	SCREW, M3.9x13, CHEESE PH
	(GAP)	4	1		1024.00063.00	O-RING,Lower 3 15/16" x 3/32"
		5		ve rebuild kit 0.00098.00	Kit contains: SPF	RING DIAPHRAGM PLUNGER

Brew Basket Parts Complete Blastic Brow Basket	(STANDADD)		
Complete Plastic Brew Basket Part Number	•	CBS-2140X	(TS
		Part Number	Plug Insert color
	COLLEGE (CALLO)	1023.00195.00	BROWN PLUG, BB HANDLE
Brown colored insert is standard		1023.00194.00	BLACK PLUG, BB HANDLE
- Standard		1023.00190.00	RED PLUG, BB HANDLE
Brew basket handle plug		1023.00191.00	GREEN PLUG, BB HANDLE
for polymeric brew baskets is		1023.00192.00	ORANGE PLUG, BB HANDLE
available in optional colors.		1023.00180.00	BLUE PLUG, BB HANDLE



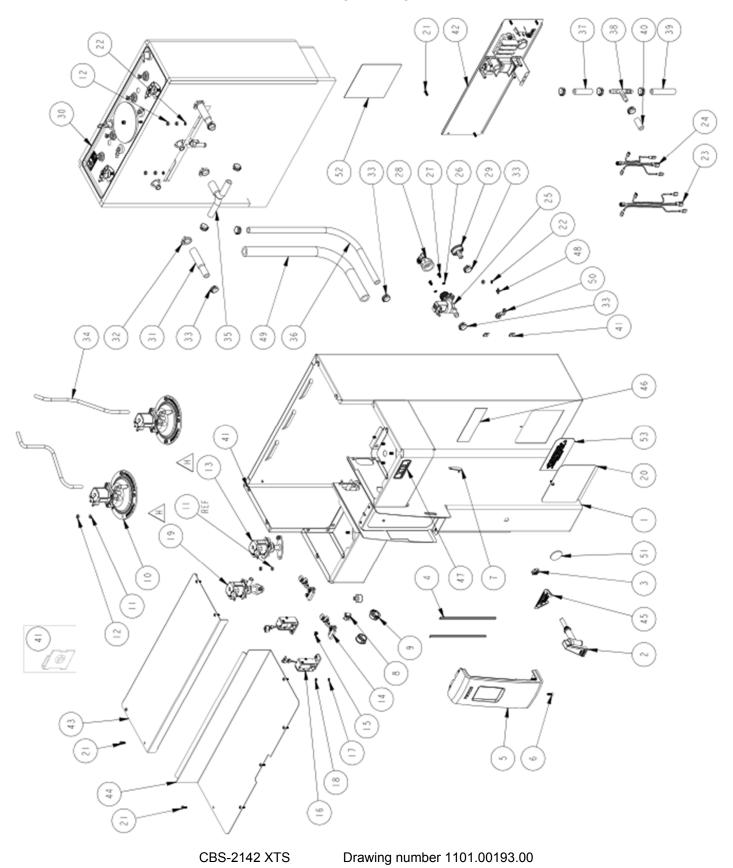
	OPTIONAL Stainless Steel Brew basket										
Ħ			B003218B1	Complete Stainless Steel Brew basket for CBS-2140XTS							
	Ref#	Qty	Part Number	Description							
	1	1	1112.00128.00	BB WLDMNT 13" X 5", .218 DIA HOLE							
N	2	1	1046.00025.00	BREW BASKET WARNING LABEL							
,	3	1	1082.00040.00	SCREW, 1/4-20 X .5, FL HD, PH., W/NYLN							
	4	1	1009.00006.00	WIRE BASKET							
	5	1	1102.00064.00	HANDLE W/MAGNET ASY, BLACK							
	Optional colored handle		1102.00065.00	HANDLE W/MAGNET ASY, RED							
	Optional colored handle		1102.00066.00	HANDLE W/MAGNET ASY, GREEN							
	Optional colored	handle	1102.00067.00	HANDLE W/MAGNET ASY, ORANGE							

CBS-2141XTS

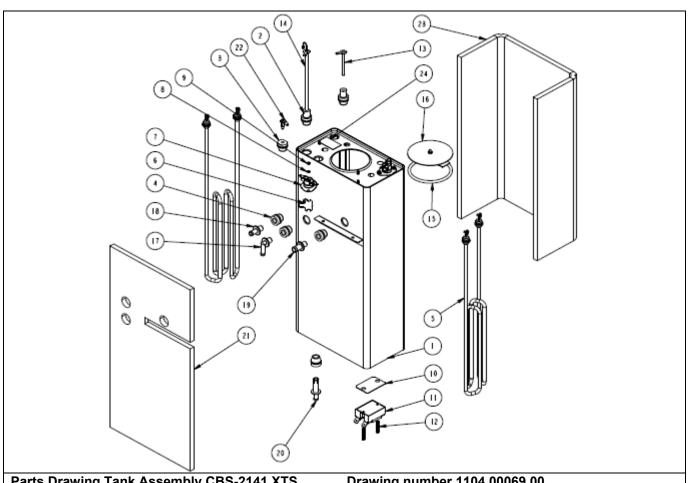


			Parts Drawing CBS-2141 XTS Drawing number 1101.00198.00
Ref	Qty	Part Number	Part Name and Description
1	1	1111.00049.00	WELDMENT BODY COMPLETE, CBS-2141 XTS
2	2	1024.00049.00	EDGE PROTECTOR, 7.00"LG, CBS-2130
3	1	1102.00210.00	ASSEMBLY, FRONT PANEL, CBS-2100 XTS
4	4	1082.00058.00	SCREW, # 8-32 X 5/8, FLAT HD, PH, 18-8 SS
5	1	1071.00055.00	FAUCET, HOT WATER, PSC-BR-8, WITH FLAT AND STEM
6	1	1084.00048.00	JAM NUT, 1/2-20 UNF, NICKEL PLATED BRASS
7	1	1046.00006.00	LABEL, WARNING, "HOT WATER FAUCET"
8	1	1024.00040.00	CARD PLUG, HWD-2100
9	1	1046.00003.00	LABEL, CSD WARNING, 1.5" X 5.0"
10	1	1024.00063.00	O-RING, 3 15/16" x 3/32" CS, DASH # 154, BUNA-N, DURO-A50
11	1	1102.00203.00	ASSEMBLY, SPRAY HOUSING, DSVP11 DESIGN
12	6	1083.00010.00	WASHER, #10 SCREW W/NEOPRENE-BONDED SEAL
13	13	1084.00006.00	NUT, 8-32 18-8 HEX MACHINE SCREW
14 15	1	1102.00390.00 1102.00113.00	ASSEMBLY, BYPASS VALVE, RIGHT SWITCH, REED, ASSEMBLY
16	2	1029.00006.00	NUT, FINGER, #4-40 NYLON
17	1	1102.00219.00	ASSEMBLY, BB LOCKER, 24VDC
18	2	1083.00009.00	WASHER, #6 SCREW , INTL TOOTH LOCKWASHER
19	2	1083.00009.00	NUT, HEX, #6-32, UNDERSIZED, ZINC PLATED
20	1	1086.00004.00	BUSHING, SNAP, 1" MOUNTING HOLE
21	1	1023.00159.00	CORNER INSERT
22	5	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK
23	1	1001.00181.00	COVER FRONT, CBS-2100 XTS
24	13	1082.00017.00	SCREW, TRUSS HD. PHIL. MACHINE, # 6-32 X 1/2 LG.
25	1	1057.00043.00	SOLENOID VALVE, 5.5L/min, 180 DEG, 24VDC
26	2	1083.00005.00	WASHER, M4 18-8 INTERNAL TOOTH LOCKWASHER
27	2	1082.00010.00	SCREW, M4x10 ZINC-PLATED PAN HD. PHILLIPS MACH.
28	1	1102.00243.00	ADAPTER ASSY, 3/4" BSP x 1/4" NPT x 3/8" TUBE
29	1	1023.00147.00	PLUG, TANK SERVICE DRAIN FOR 18 GA AND UP BODY
30	1	1402.00045.00	HARNESS LOW AMP, CBS-2141/51 XTS, CE/UL
31	1	1402.00063.00	HARNESS HIGH AMP, CBS-2131/41 XTS (L1,N,L2), UL
32	1	1104.00069.00	TANK ASSY, 2 X 1.5kW/120V, CBS-2141 XTS
32	1	1104.00071.00	TANK ASSY, 2 X 1.7kW/120V, CBS-2141 XTS TANK ASSY, 2 X 2.3kW/120VAC, CBS-2141 XTS
33	1	1104.00067.00 1024.00065.00	CONNECTOR, SILICONE, TANK TO BREW VALVE
34	1	1086.00002.00	CLAMP, HOSE, SIZE "G" NYLON
35	11	1086.00003.00	UNICLAMP, 15.9 HOSE OD CLAMP
36	1	1025.00078.00	TUBE, 5/16 OD x 3/16 ID x 14.00 LG.
37	1	1025.00061.00	TUBE, 9/16'OD X 5/16"ID X 2.75"LG
38	1	1025.00083.00	TUBE, 5/8 OD x 3/8 ID x 18.0" LG.
39	1	1025.00060.00	TUBE, 9/16"OD X 5/16"ID X 3.25"LG
40	1	1029.00002.00	FITTING, HOSE BARB TEE, SIZE 3/8"
41	1	1025.00077.00	TUBE, 9/16"OD X 5/16"ID X 6.50" LG.
42	1	1025.00058.00	TUBE, 9/16"OD X 5/16"ID X 25.00"LG
43	11	1084.00011.00	NUT, CLIP ON (J-NUT), #6-32, 22-20 GA., BLK-PH FINISH
44	1	1102.00209.00	ASSEMBLY BACK PANEL, CBS-2131 AND 2141
45	1	1001.00125.00	COVER, TOP CBS-2131 AND 2141
46	1	1001.00126.00	COVER, UPPER BASE, CBS-2131 AND 2141
47	1	1041.00013.00	LABEL, XTS, 2130,2140 AND 2150 SERIES
48	1	1044.00012.00	LABEL GROUND, CE
49	1	1022.00073.00	INSULATION, 5/8 ID x 3/8 THK. x 17.5" LG.
50 51	1	1065.00002.00 1044.00014.00	CONNECTOR, COPPER LUG NOTICE TO LICENSED ELECTRICIAN
52	1	1044.00014.00	LABEL, "CSD"
53	1	1046.00035.00	LABEL, USD LABEL, WARNING "TO REDUCE RISK OF ELECTRIC SHOCK OR FIRE"
54	1	1046.00033.00	TAG, INFORMATION
*	1	1052.00029.00	EMI FILTER, TWO LINE 20A, 120/250VAC [CE MODEL ONLY]-Not shown
*	4	1073.00002.00	LEG, FLANGE FOOT, 4.0" HIGH
*	1	B014218BN2	Plastic Brew Basket: Standard-included with all equipment
t	1	B003218B1	OPTIONAL Stainless Steel Brew Basket
*Not	Show	n Standard-includ	ed with all equipment †-Option accessory for purchase

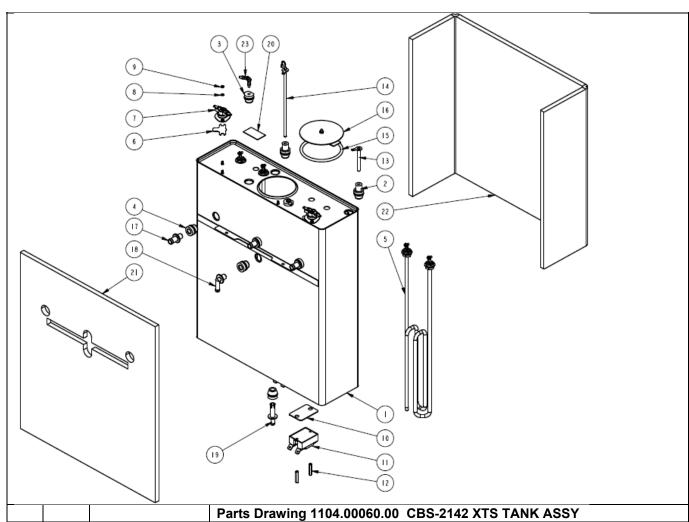
CBS-2142XTS



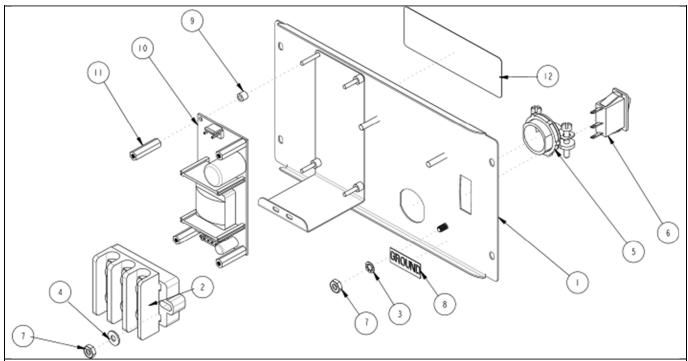
			Parts Drawing CBS-2142 XTS Drawing number 1101.00193.00
Ref	Qty	Part Number	Part Name and Description
1	1	1111.00048.00	WELDMENT BODY COMPLETE, CBS-2142 XTS
2	1	1071.00055.00	FAUCET, HOT WATER, PSC-BR-8, WITH FLAT AND STEM
3	1	1084.00048.00	JAM NUT, 1/2-20 UNF, NICKEL PLATED BRASS
4	2	1024.00049.00	EDGE PROTECTOR, 7.00"LG, CBS-2130
5	1	1102.00210.00	ASSEMBLY, FRONT PANEL, CBS-2100 XTS
6	4	1082.00058.00	SCREW, # 8-32 X 5/8, FLAT HD, PH, 18-8 SS
7	1	1024.00040.00	CARD PLUG, HWD-2100
8	2	1023.00159.00	CORNER INSERT
9	2	1086.00004.00	BUSHING, SNAP, 1" MOUNTING HOLE
10	2	1102.00203.00	ASSEMBLY, SPRAY HOUSING, DSVP11 DESIGN
11	12	1083.00010.00	WASHER, #10 SCREW W/NEOPRENE-BONDED SEAL
12	18	1084.00006.00	NUT, 8-32 18-8 HEX MACHINE SCREW
13	1	1102.00390.00	ASSEMBLY, BYPASS VALVE, RIGHT
14	2	1102.00113.00	SWITCH, REED, ASSEMBLY
15	4	1029.00006.00	NUT, FINGER, #4-40 NYLON
16	2	1102.00219.00	ASSEMBLY, BB LOCKER, 24VDC
17	4	1083.00009.00	WASHER, #6 SCREW , INTL TOOTH LOCKWASHER
18	4	1084.00010.00	NUT, HEX, #6-32, UNDERSIZED, ZINC PLATED
19	1	1102.00391.00	ASSEMBLY, BYPASS VALVE, LEFT
20	2	1001.00181.00	COVER FRONT, CBS-2100 XTS
21	15	1082.00017.00	SCREW, TRUSS HD. PHIL. MACHINE, # 6-32 X 1/2 LG.
22	4	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK
23	1	1402.00051.00	HARNESS LOW AMP, CBS-2142/52 XTS, CE/UL
24	1	1402.00060.00	HARNESS, HIGH AMP, CBS-2142 XTS, UL
25	1	1057.00043.00	SOLENOID VALVE, 5.5L/min, 180 DEG, 24VDC
26	2	1083.00005.00	WASHER, M4 18-8 INTERNAL TOOTH LOCKWASHER
27	2	1082.00010.00	SCREW, M4x10 ZINC-PLATED PAN HD. PHILLIPS MACH.
28	1	1102.00243.00	ADAPTER ASSY, 3/4" BSP x 1/4" NPT x 3/8" TUBE
29	1	1023.00147.00	PLUG, TANK SERVICE DRAIN FOR 18 GA AND UP BODY
30	1	1104.00060.00	TANK ASSY, CBS-2142 XTS, 2 x 3kW/240VAC
31	2	1024.00065.00	CONNECTOR, SILICONE, TANK TO BREW VALVE
32	3	1086.00002.00	CLAMP, HOSE, SIZE "G" NYLON
33	12	1086.00003.00	UNICLAMP, 15.9 HOSE OD CLAMP
34	2	1025.00078.00	TUBE, 5/16 OD x 3/16 ID x 14.00 LG.
35	1	1024.00064.00	BY-PASS MANIFOLD, SILICONE, CBS-2142/52
36	1	1025.00083.00	TUBE, 5/8 OD x 3/8 ID x 18.0" LG.
37	1	1025.00060.00	TUBE, 9/16"OD X 5/16"ID X 3.25"LG
38	1	1029.00002.00	FITTING, HOSE BARB TEE, SIZE 3/8"
39	1	1025.00077.00	TUBE, 9/16"OD X 5/16"ID X 6.50" LG.
40	1	1025.00058.00	TUBE, 9/16"OD X 5/16"ID X 25.00"LG
41	12	1084.00011.00	NUT, CLIP ON (J-NUT), #6-32, 22-20 GA., BLK-PH FINISH
42	1	1102.00208.00	ASSEMBLY BACK PANEL, CBS-2132 AND 2142
43	1	1001.00127.00	COVER, TOP CBS-2132 AND 2142
44	1	1001.00128.00	COVER, UPPER BASE, CBS-2132 AND 2142
45	1	1046.00006.00	LABEL, WARNING, "HOT WATER FAUCET"
46	2	1046.00003.00	LABEL, CSD WARNING, 1.5" X 5.0"
47	1	1041.00013.00	LABEL, XTS, 2130,2140 AND 2150 SERIES
48	1	1044.00012.00	LABEL GROUND, CE
49	1	1022.00073.00	INSULATION, 5/8 ID x 3/8 THK. x 17.5" LG.
50	1	1065.00002.00	CONNECTOR, COPPER LUG
51	1	1041.00002.00	LABEL, "CSD"
52	1	1046.00035.00	LABEL, WARNING "TO REDUCE RISK OF ELECTRIC SHOCK OR FIRE"
53	1	1046.00020.00	TAG, INFORMATION
*	1	1052.00036.00	EMI FILTER, THREE LINE 20A, 250/440VAC [CE Model Only] -Not shown
*	3	1073.00002.00	LEG, FLANGE FOOT, 4.0" HIGH
*	1	B014218BN2	Plastic Brew Basket: Standard-included with all equipment
†	1	B003218B1	OPTIONAL Stainless Steel Brew Basket
*Not	Snow	n Standard-includ	ded with all equipment †-Option accessory for purchase



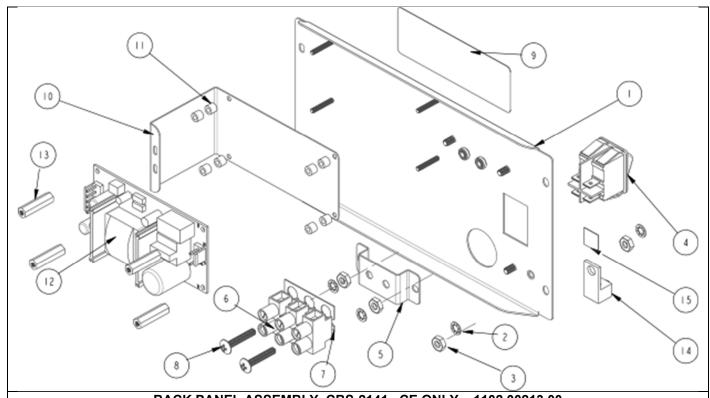
Parts	Parts Drawing Tank Assembly CBS-2141 XTS Drawing number 1104.00069.00						
Ref	Qty	Part Number	Part Name and Description				
1	1	1114.00103.00	WELDMENT TANK, CBS-2141, GROMMET DESIGN, 2 HEATERS				
2	2	1024.00053.00	LEVEL AND TEMP PROBE GROMMET				
3	1	1024.00062.00	GROMMET, SHORT, SILICONE, LEVEL AND TEMP PROBE				
4	4	1024.00050.00	GROMMET, SILICONE, 11.4mm ID				
5	2	1107.00030.00	HEATER ASSEMBLY, IMMERSION 1500W/120VAC				
5	2	1107.00031.00	HEATER ASSEMBLY, IMMERSION 1700W/120VAC				
5	2	1107.00029.00	HEATER ASSEMBLY, IMMERSION 2300W/120VAC				
6		1003.00005.00	BRACKET, ONE SHOT THERMOSTAT				
7	2	1053.00003.00	THERMOSTAT, SINGLE SHOT, 240V/40A				
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	1052.00033.00	RELAY, SOLID STATE, 50A/480VAC, W/BUILD IN VARISTOR				
12	4	1081.00042.00	STANDOFF, 1/4" HEX				
13	1	1112.00019.00	PROBE WELDMENT, WATER LEVEL 2.600" 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	1023.00168.00	FITTING, HOT WATER, GROMMET DESIGN				
19	1	1023.00167.00	FITTING, BREW, GROMMET DESIGN				
20	1	1023.00166.00	FITTING, COLD WATER INLET, GROMMET DESIGN				
21	1	1022.00065.00	TANK INSULATION, FRONT, CBS-2141e, GROMMET DESIGN				
22	1	1029.00023.00	FITTING, SINGLE BARBED ELBOW, 1/4", KYNAR				
23	1	1022.00074.00	TANK INSULATION, BACK, CBS-2141e, GROMMET DESIGN				
24	1	1044.00004.00	LABEL, WARNING-HIGH VOLTAGE				



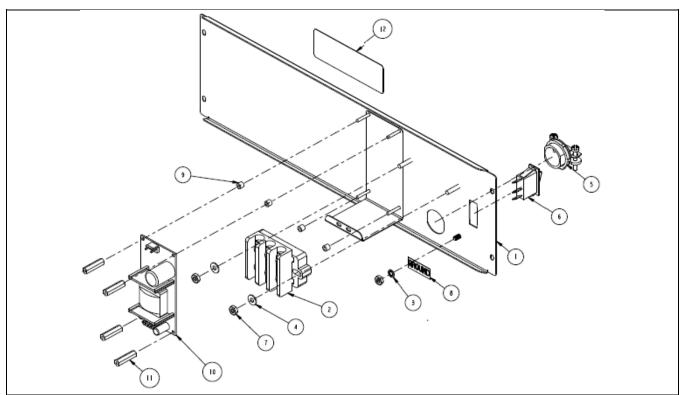
			ts Drawing 1104.00060.00 CBS-2142 XTS TANK ASSY							
Ref	Qty	Part Number	Part Name and Description							
1	1	1114.00083.00	WELDMENT TANK CBS-2142, GROMMET DESIGN							
2	2	1024.00053.00	LEVEL AND TEMP PROBE GROMMET							
3	2	1024.00062.00	GROMMET, SHORT, SILICONE, LEVEL AND TEMP PROBE							
4	5	1024.00050.00	GROMMET, SILICONE, 11.4mm ID							
5	2	1107.00005.00	ASSEMBLY,IMMERSION HEATER, 3000W, 240VAC							
6	2	1003.00005.00	BRACKET, ONE SHOT THERMOSTAT							
7	2	1053.00003.00	THERMOSTAT, SINGLE SHOT, 240V/40A							
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	1052.00033.00	RELAY, SOLID STATE, 50A/480VAC, W/BUILD IN VARISTOR							
12	4	1081.00042.00	STANDOFF, 1/4" HEX							
13	1	1112.00019.00	PROBE WELDMENT, WATER LEVEL 2.600" 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	3	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, WARNING-HIGH VOLTAGE							
21	1	1022.00066.00	TANK INSULATION FRONT, CBS-2142							
22	1	1022.00067.00	TANK INSULATION BACK, CBS-2142							
23	2	1029.00023.00	FITTING, SINGLE BARBED ELBOW, 1/4", KYNAR							



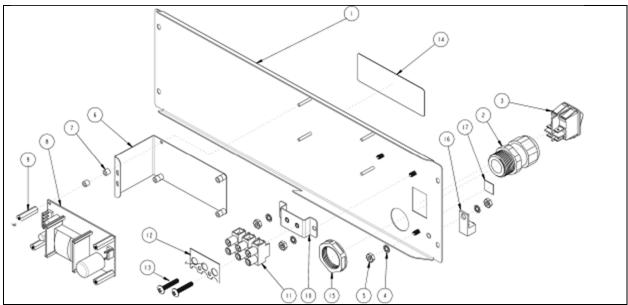
	BACK PANEL ASSEMBLY, CBS-2141 1102.00209.00										
Ref#	Qty	Part number	Description								
1	1	1112.00226.00	WELDMENT BACK COVER 2131 AND 2141								
2	1	1052.00002.00	TERMINAL BLOCK, 3 POLE, W/ MARKING STRIP								
3	1	1083.00011.00	/ASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK								
4	2	1083.00016.00	WASHER, #8 SCREW SIZE, FLAT								
5	1	1086.00008.00	CONNECTOR, CABLE CLAMP, 3/4"								
6	1	1058.00020.00	SWITCH, PWR ROCKER RED, ILLUM. 250VAC								
7	3	1084.00006.00	NUT, 8-32 18-8 HEX MACHINE SCREW								
8	1	1044.00003.00	LABEL GROUND								
9	4	1081.00006.00	SPACER, 6MM OD x 3.2MM ID x 5MM LG, Z/P								
10	1	1052.00001.00	POWER SUPPLY, 90-264VAC/24VDC, 1.8A								
11	4	1029.00012.00	SPACER, .25" HEX X 1" LG, FEM #4-40 THREAD								
12	1	1046.00030.00	LABEL WARNING, DISCONNECT FROM POWER SOURCE								
	1	1102.00241.00	POWER CORD ASSEMBLY, 15A/120VAC, 5-15P NEMA PLUG								
	1	1102.00242.00	POWER CORD ASSEMBLY, 20A/120VAC, 5-20P NEMA PLUG								



	BACK PANEL ASSEMBLY, CBS-2141 CE ONLY 1102.00213.00										
Ref#	Qty	Part number	Description								
1	1	1112.00521.00	WELDMENT BACK COVER, CBS-2131/41, EU, CE								
2	4	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK								
3	4	1084.00006.00	NUT, 8-32 18-8 HEX MACHINE SCREW								
4	1	1058.00024.00	SWITCH, POWER, DOUBLE POLE, 16A, 125/250 VAC								
5	1	1112.00246.00	WELDMENT BRACKET TERMINAL BLOCK, 3 POLE								
6	1	1052.00022.00	EUROSTRIP HE10 TERM. BLOCK, 3 POLE, 50AMP, 18-8 AWG								
7	1	1052.00025.00	MARKING PLATE BLANK FOR EUROSTRIP HE10, 1.750" LG.								
8	2	1082.00082.00	SCREW, PHILLIP HD., 8-32 THREAD								
9	1	1046.00030.00	LABEL WARNING, DISCONNECT FROM POWER SOURCE								
10	1	1003.00170.00	BRACKET, GUARD								
11	8	1081.00006.00	SPACER, 6MM OD x 3.2MM ID x 5MM LG, Z/P								
12	1	1052.00001.00	POWER SUPPLY, 90-264VAC/24VDC, 1.8A								
13	4	1029.00012.00	SPACER, .25" HEX X 1" LG, FEM #4-40 THREAD								
14	1	1065.00009.00	GROUND LUG CONNECTOR, 14-2 AWG, ALUMINUM								
15	1	1044.00013.00	LABEL EQUIPOTENTIALITY, CE								

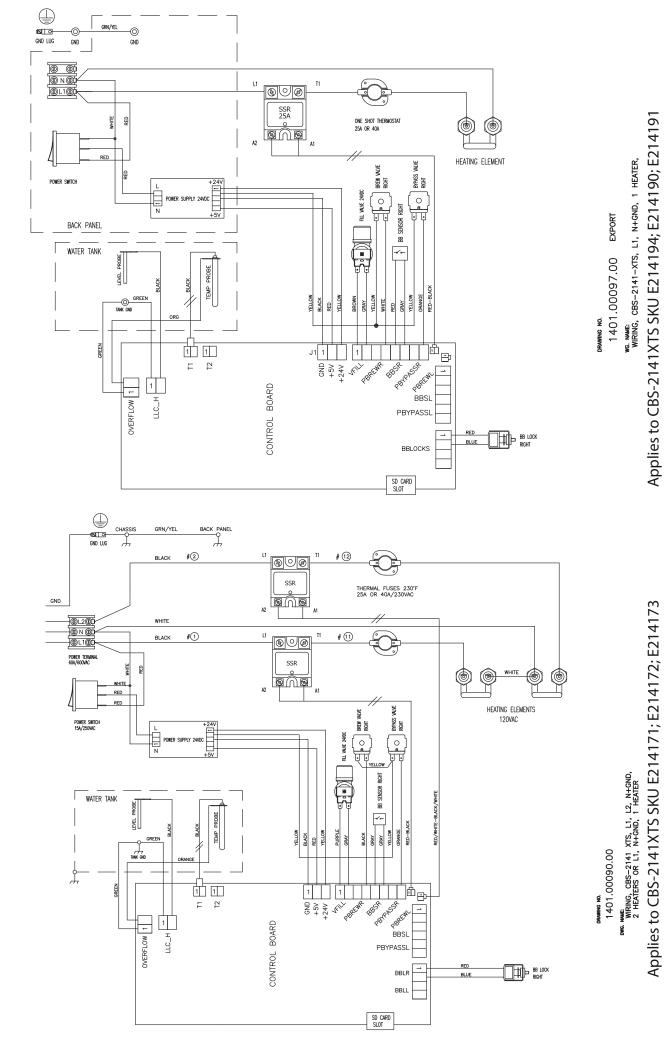


	BACK PANEL ASSEMBLY, CBS-2142 1102.00208.00									
Ref#	Qty	Part number	Description							
1	1	1112.00227.00	WELDMENT, BACK COVER CBS-2142 AND 2142							
2	1	1052.00002.00	TERMINAL BLOCK, 3 POLE, W/ MARKING STRIP							
3	1	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK							
4	2	1083.00016.00	WASHER, #8 SCREW SIZE, FLAT							
5	1	1086.00008.00	CONNECTOR, CABLE CLAMP, 3/4"							
6	1	1058.00020.00	SWITCH, PWR ROCKER RED, ILLUM. 250VAC							
7	3	1084.00006.00	NUT, 8-32 18-8 HEX MACHINE SCREW							
8	1	1044.00003.00	LABEL GROUND							
9	4	1081.00006.00	SPACER, 6MM OD x 3.2MM ID x 5MM LG, Z/P							
10	1	1052.00001.00	POWER SUPPLY, 90-264VAC/24VDC, 1.8A							
11	4	1029.00012.00	SPACER, .25" HEX X 1" LG, FEM #4-40 THREAD							
12	1	1046.00030.00	LABEL WARNING, DISCONNECT FROM POWER SOURCE							



	BACK PANEL ASSEMBLY, CBS-2142 CE ONLY 1102.00218.00										
Ref#	Qty	Part number	Description								
1	1	1112.00245.00	WELDMENT, BACK COVER,CBS-2132, 2142 EU								
2	1	1086.00031.00	BUSHING, STRAIN RELIEF, BLACK, .354"630"								
3	1	1058.00024.00	SWITCH, POWER, DOUBLE POLE, 16A, 125/250 VAC								
4	4	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK								
5	4	1084.00006.00	NUT, 8-32 18-8 HEX MACHINE SCREW								
6	1	1003.00170.00	BRACKET, GUARD								
7	8	1081.00006.00	SPACER, 6MM OD x 3.2MM ID x 5MM LG, Z/P								
8	1	1052.00001.00	POWER SUPPLY, 90-264VAC/24VDC, 1.8A								
9	4	1029.00012.00	SPACER, .25" HEX X 1" LG, FEM #4-40 THREAD								
10	1	1112.00246.00	WELDMENT BRACKET TERMINAL BLOCK, 3 POLE								
11	1	1052.00022.00	EUROSTRIP HE10 TERMINAL BLOCK., 3 POLE, 50AMP, 18-8								
12	1	1052.00025.00	PLATE, MARKING #BS1016E								
13	2	1082.00082.00	SCREW, PHILLIP HD., 8-32 THREAD								
14	1	1046.00030.00	LABEL WARNING, DISCONNECT FROM POWER SOURCE								
15	1	1086.00032.00	LOCKNUT, HEX BLACK, FOR SKINTOP RELIEF								
16	1	1065.00009.00	GROUND LUG CONNECTOR, 14-2 AWG, ALUMINUM								
17	1	1044.00013.00	LABEL EQUIPOTENTIALITY, CE								



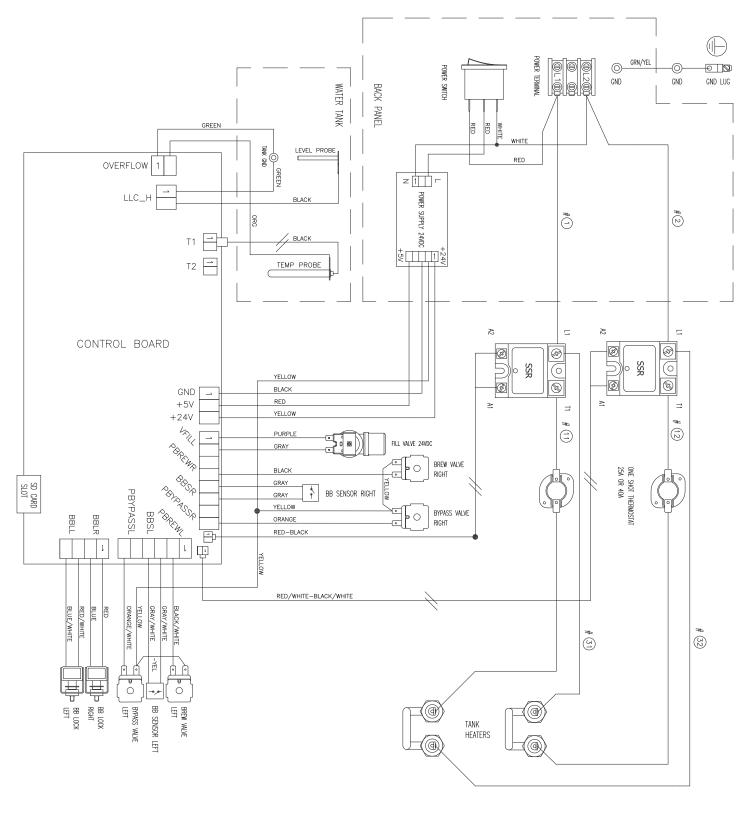


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BB LOCK RIGHT

BBLOCKS

SD CARD SLOT

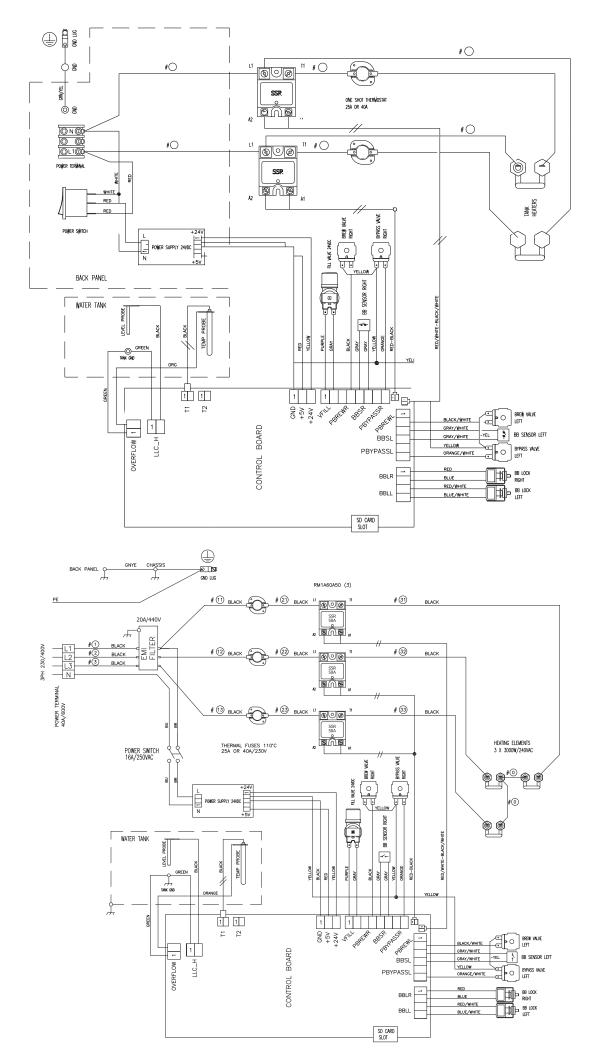


DRAWING NO.

1401.00055.00

DWG. NAME:
WIRING, CBS-2142-XTS, L1, L2, GND,
2 HEATERS

Applies to CBS-2142XTS SKU E214251



Applies to CBS-2142XTS SKU E214290; E214291 PWG. NAME: WIRING, CBS-2142-XTS, L1, N+GND, 2 HEATERS, EXPORT

1401.00098.00

Applies to CBS-2142XTS SKU E214261, E214262

230/400V, 3L, N, PE, DRWING NO. 1401.00071.00

CBS-2142 XTS 12.4A/3x3kW

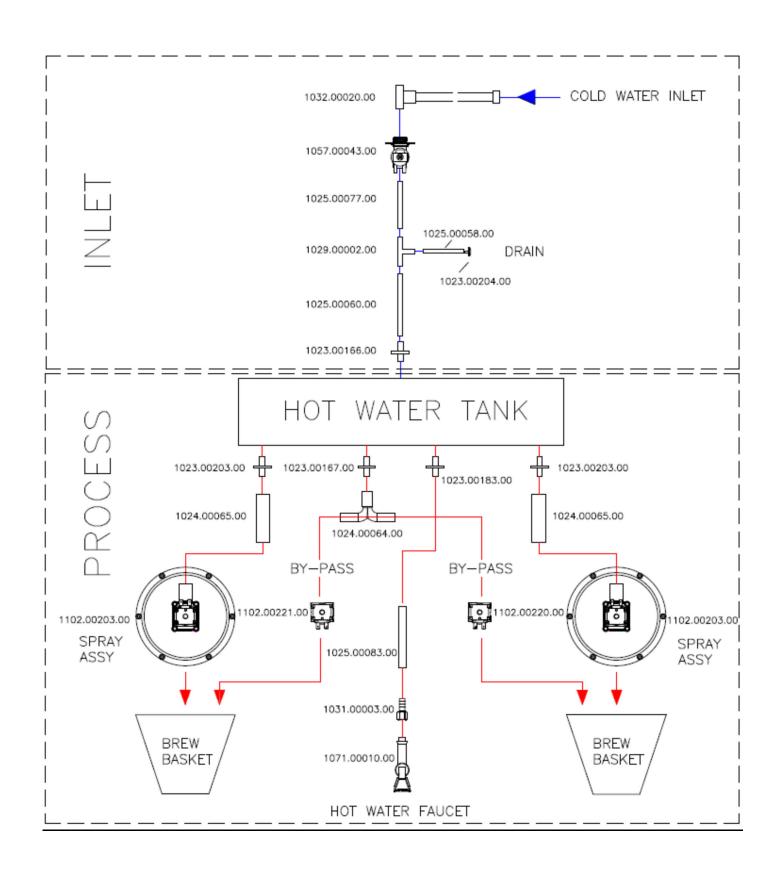
MAX AMP DRAW 12.4

HEATER VOLTAGE PH WIRES KW 3x3.0kW/240V 230/400 3 31, N, PE 8.6

CBS-2142 XTS

CBS 2141XTS WATER HANDELING LAYOUT COLD WATER INLET 1032.00020.00 1057.00043.00 1025.00077.00 1025.00058.00 1029.00002.00 DRAIN 1023.00204.00 1025.00060.00 1023.00166.00 HOT WATER TANK 1023.00183.00 H 1023.00167.00 1023.00203.00 1025.00061.00 1024.00065.00 PROCESS 1025.00083.00 BY-PASS 1102.00203.00 1102.00220.00 SPRAY 1031.00003.00 ASSY 1071.00010.00 HOT WATER FAUCET BREW BASKET

CBS 2142XTS WATER HANDELING LAYOUT



	End of section notes																					
N																						