

User's Guide







Models: CBS-2131 CBS-2132 3 liter and 1 gallon airpot brewers





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

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Contact Information

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Description & Features

The CBS-2130 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
- Bypass percent (Percentage of the brew volume)
- Three selectable spray patterns
- Drip delay (The time between the end of the brew cycle to empty the brewbasket and end of the brewing cycle.)

Using these variables, the software calculates how much water to use for prewetting, bypass (optional), and brewing. The total brew time is divided 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. The optional bypass valve opens at the beginning of the brew cycle and dispenses the correct amount of water all at once. Spray pattern into brew basket may be user set for perfect penetration.

Features

- Touchscreen Operation
- Cascading Spray Dome-no holes to clog in sprayhead
- Four fully programmable batch sizes per side
- Batch sizing
- Customizable batch name
- Recipe copy
- Screen logo customizable by user from SD card
- SD card firmware program and upgrade installation
- User programs save to and load from SD cards

- Pump circuit calibration on startup
- Magnetic flux brew basket sensor
- Dispenser locator under brew basket
- Brew at temperature protection
- Brew mechanism is digitally adjustable
- Adjustable bypass (with bypass option)
- Three adjustable spray patterns
- Totalizing counters for brewer functions
- Shipped ready to operate out of the box

Specifications

Requirements

- Water Requirements:
 - CBS-2131: 20-75 psig (138-517kPa) 1½gpm/(5.7lpm) CBS-2132: 20-75 psig (138-517kPa) 1½gpm/(5.7lpm)
- ❖ Water inlet fitting is a 1/4 inch male flare.
- ❖ Brew Volume:

Full Batch 3 liter CBS-2132 & CBS-2131—3 liter version Full Batch 1gal. CBS-2132 & CBS-2131—1 gal. version

- ❖ 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

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

Weights Capacities and Measurements

- 11 - 19 11	Troights Supusitios and modern smalls									
	Weights and Capacities & Measurements; 3 liter and 1 gallon brewers									
Brewer	Height	Width	Depth	Empty Weight	Filled Weight	Total Weight- Brewer & Filled Dispenser	Shipping Weight	Shipping Dimensions		
CBS-2131	21 ¾"	11 ¾"	20 ¾"	29 lb	50 lb	61.2lb	36.3 lb	22 ¾"x 16 5/8" x 22 7/8"		
3 liter	54.3cm	30.3cm	51.8cm	13.1kg	22.7 kg	27.8 kg	16.5 kg	57.8 x42.3x58.1cm		
CBS-2131	23 ¾"	11 ¾"	20 ¾"	29 lb	50 lb	63lb	36.3 lb	22 ¾"x 16 5/8" x 22 7/8"		
I gallon	59.4cm	30.3cm	51.8cm	13.1kg	22.7 kg	28.6 kg	16.5 kg	57.8 x42.3x58.1cm		
CBS-2132	21 ¾"	19 ¾"	20 ¾"	42.6 l b	87.6 lb	110lb	49.4 lb	24½" x 22½" x 23"		
3 liter	54.3cm	50.2cm	51.8cm	19.3 kg	39.7kg	49.9 kg	22.4 kg	62.2 x 58.1 x 58.4cm		
CBS-2132	23 ¾"	19 ¾"	20 ¾"	42.6 l b	87.6 lb	114 lb	49.4 l b	24½" x 22½" x 23"		
I gallon	59.4cm	50.2cm	51.8cm	19.3 kg	39.7 kg	51.7 kg	22.4 kg	62.2 x 58.1 x 58.4cm		

Electrical Configuration and Brewing Efficiency

Electrical Configurations- CBS-2131—3 liter version									
Configuration Heater Code Configuration Bypass Voltage Phase Wires Electrical Connection KW Maximum Amp Gallon/Hour (3 liters per batch)									
E213103	1 X 1.5 kW	NO	100 - 120	1	2+G	NEMA 5-15P	1.1 – 1.6	10.9 – 13.0	3.9 gal/14.8 lit
E213104	1 X 1.7 kW	NO	100 - 120	1	2+G	NEMA 5-15P	1.3 – 1.8	12.3 - 14.7	4.4 gal/16.7 lit
E213101	1 X 2.3 kW	NO	100 - 120	1	2+G	NEMA 5-20P	1.7 – 2.4	16.5 - 19.7	5.8 gal/22 lit
E213105	1 X 2.3 kW	NO	200 - 240	1	2+G	Cord/No Plug	1.7 – 2.4	8.5 – 10.1	5.8 gal/22 lit
E213107	1 X 3.0 kW	NO	200 - 240	1	2+G	Cord/No Plug	2.2 – 3.1	10.9 – 13.0	7.7 gal/29.1 lit

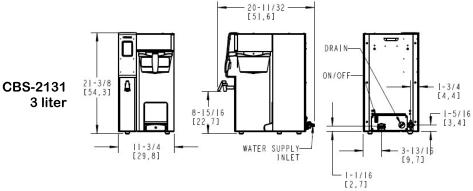
Electrical Configurations- CBS-2132—3 liter version										
Configuration Code	Bynass Voltage Phase Wires KW									
E213201	2 X 2.3 kW	NO	200-240	1	2+G	Terminal Block	3.3 – 4.7	16.5 - 19.7	11.5 gal/43.5 lit	
E213202	E213202 2 X 3.0 kW NO 200-240 1 2+G Terminal Block 4.2 – 6.1 21.3—25.5 14.0 gal/53 lit									

	Electrical Configurations- CBS-2131—1 gallon airpot version									
Configuration Code	Heater Configuration	Bypass	Voltage	Phase	Wires	Electrical Connection	KW	Maximum Amp Draw	Gallon/Hour (1 gallon per batch)	
E213102	1 X 2.3 kW	NO	100 - 120	1	2+G	NEMA 5-20P	1.7 – 2.4	16.5 - 19.7	5.8 gal/22 lit	
E213112	1 X 2.3 kW	YES	100 - 120	1	2+G	NEMA 5-20P	1.7 – 2.4	16.5 - 19.7	5.8 gal/22 lit	
E213106	1 X 2.3 kW	NO	200 - 240	1	2+G	Cord/No Plug	1.7 – 2.4	8.5 – 10.1	5.8 gal/22 lit	
E213116	1 X 2.3 kW	YES	200 - 240	1	2+G	Cord/No Plug	1.7 – 2.4	8.5 – 10.1	5.8 gal/22 lit	
E213108	1 X 3.0 kW	NO	200 - 240	1	2+G	Cord/No Plug	2.2 – 3.1	10.9 – 13.0	7.7 gal/29.1 lit	
E213118	1 X 3.0 kW	YES	200 - 240	1	2+G	Cord/No Plug	2.2 – 3.1	10.9 – 13.0	7.7 gal/29.1 lit	

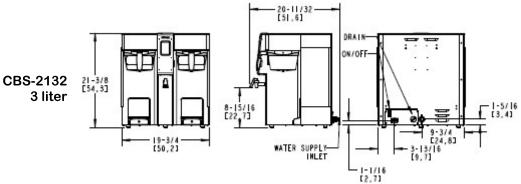
	Electrical Configurations- CBS-2132—1 gallon airpot version									
Configuration Code	Bynass Voltage Phase Wires KW									
E213203	2 X 3.0 kW	NO	200-240	1	2+G	Terminal Block	4.2 – 6.1	21.3—25.5	14.0 gal/53 lit	
E213213	2 X 3.0 kW	YES	200-240	1	2+G	Terminal Block	4.2 – 6.1	21.3—25.5	14.0 gal/53 lit	

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

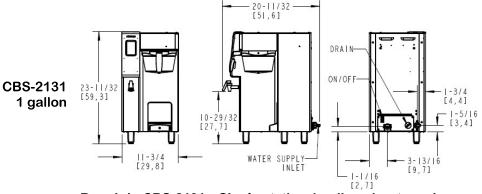
Dimensions & Utility Connections—Rough-in drawings

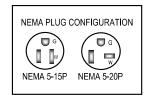


Rough-in CBS-2131—Single station 3 liter airpot version



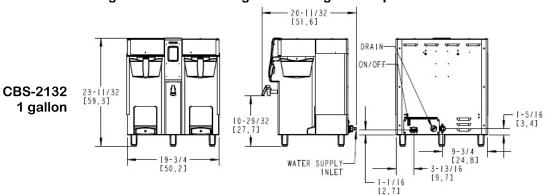
Rough-in CBS-2132—Twin station 3 liter airpot version





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Rough-in CBS-2131—Single station 1 gallon airpot version



Rough-in CBS-2132—Twin station 1 gallon airpot version

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:

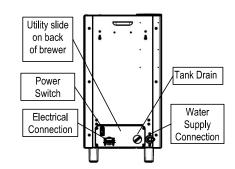
- All installations must comply with applicable federal, state, or local plumbing codes.
- An inline water filter is highly recommended. It should be installed after a water shutoff valve and in a position to facilitate filter replacement.
- ❖ The water line and newly installed filter cartage must be 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 Instructions

Brewer Setup

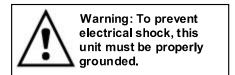
- 1. Review the dimensions for the unit and verify that it will fit properly in the space intended for it. Verify that the counter or table will support the total weight of the brewer and dispensers when filled (specifics-page 3).
- 2. Place the brewer on the counter or stand.
- 3. When the brewer is 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.
- 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).
- 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.

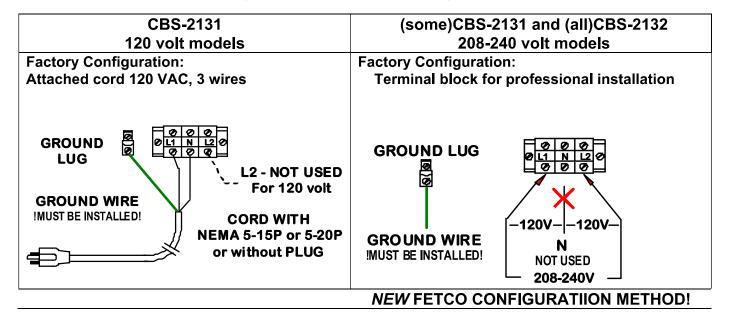




WARNING—DANGER

Do not plug-in or electrically energize this equipment, or attempt operation without all covers in place and all screws fastened.

Electrical Configurations Terminal Block Diagram - US & Canada



Final Setup

Final Setup

- 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)
- 4. Pre-check will display: "DC voltage calibration for pumps is running...Please wait...Calibration is successfully done". (15 seconds)
- 5. The water tank will begin filling. FETCO Home Screen #1 will read "FILLING".
- 6. When the water level rises and is sensed by the probe at the top of the tank the heaters will activate
- 7. Heaters are automatically disabled until the tank is full.
- 8. While the water is heating Screen #2 "HEATING" will display and the actual water temperature will be displayed.
- After the water has reached the set temperature Screen #3 will display "READY"
- 10. 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 Pumps in the OUTPUT section in the PROGRAMMING section.
- 11. 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"



FETCO Home Screen #2 "HEATING"



FETCO Home Screen #3 "READY



Features of your FETCO Brewer

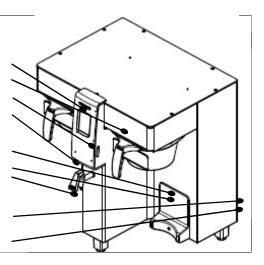
Touch-screen for brewer operation Brew basket sensor (not accessible) SD card interface port (Load & Save) Hot Water Faucet

Locator removable for service access

Locator for airpot dispenser (Two for CBS-2132)

Main power switch

Slide out back panel for service access



Accessing batch and programming menu screens

Accessing batch and programming menu screens

DC voltage calibration for pumps is running Please wait...

Calibration is successfully done.

←First message on touchscreen display at powerup. This shows only at "POWER ON", when ON/OFF. The software is analyzing and correcting any variations as a quality control feature. ← FETCO home screen will display on completion

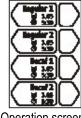
Batch selection and brew operation menu screens



← Tap FETCO HOME SCREEN to enter batch selection screen.

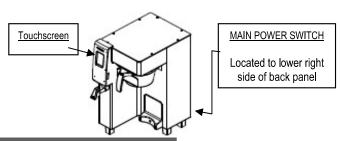
Tap left or right side batches→

Hold down batch selector pennant to begin brew.



Operation screens

Programming menu screens



OS HH

FETCO home screen

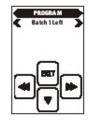
DC voltage calibration for pumps is running Please wait...

Calibration is successfully done.

← First message on touchscreen display at powerup. This shows only at "POWER ON", when ON/OFF. The software is analyzing and correcting any variations as a quality control feature.

← FETCO home screen will display on completion

From power "OFF"→Turn main power switch to "ON" Touch screen will illuminate, and pump voltage calibration will display When Complete: FETCO HOME SCREEN will display **Immediately** touch and hold finger to enter programming In 5-8 seconds "PROGRAMMING" screen will appear →



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. Don't 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 which will scratch surface.

Weekly

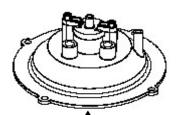
- 1. Use a commercial coffee dispenser cleaner such as URNEX™, TABZ™, DIP-IT™ or Squeak 'n Clean™.
- 2. Carefully Follow the instructions supplied with the cleaning product
- 3. Never use spray cleaners, solvent, solvent based cleaner or petroleum based polish anywhere on dispensers

Safety notes

- 1. Professional installation is required. This appliance is manufactured for commercial use only.
- 2. 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.
- 4. 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.
 - ! > 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.
- 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.
- 7. Unplug machine before disassembly or servicing.





Operating Instructions

→Quick brewer setup

NOTES

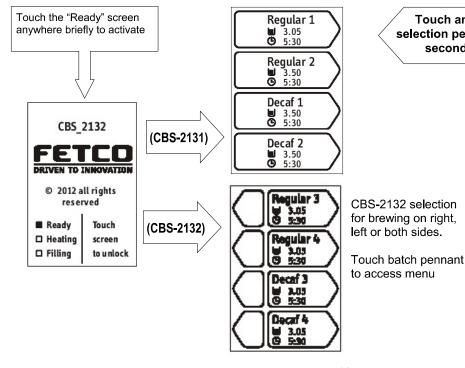
Install plumbing and electrical utilities.	-See Installation Section in this guide
Turn rear power switch "ON".	-Located on back, lower right side
Brewer hot water tank will fill in 4-8 minutes.	-Ready screen will display "■FILLING"
Heater(s) activate when tank is full	-Ready screen will display "•HEATING"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

Brewing

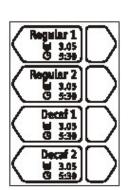
→To brew a single 3 liter coffee batch, using default recipe

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



Touch and hold finger on selection pennant for about two seconds to start brew



Brewing-shown by touchscreen

			n by touchscreen
	ver screens displayed for		NOTES
CBS-2131		CBS-2132	
CBS_2131 FETCO 2012 all rights reserved Ready Touch Heating Screen to unlock	"READY SCREEN" Tap screen to display menus	CBS_2132 FETCO © 2012 all rights reserved Ready Heating Filling to unlock	Note: there are three "BREW AT TEMPERATURE DEFINITONS". The "Brew at temperature default routine is shown below.
Regular	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 ○ 530 Regular ■ 0.75 ○ 4.30 Decaf ■ 1.50 ○ 3.30 Decaf ■ 0.75 ○ 4.30	Select and hold one button for 2 seconds	Regular 1.501 0.5350 Regular 1.075 0.430 Decafi 1.50 0.75 0.430 Decafi 1.50 0.75 0.430	Brew at tempertaure enabled: brew will start when tank temperature reaches he set point Brew at tempertaure enabled: brew will start when tank temperature reaches he set point INFO Regular 100
Regular INFO 0 5:30 °F 205 5:29	Brew started (in prewet) ←CBS-2131 CBS-2132 →	INFO Regular 1.00	Both sides of CBS-2132 brewing simaltanously.
Regular INFO 0 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 5:30 F 205 3:20	Brewing ←CBS-2131 CBS-2132 →	INFO Regular 1.00	Both sides of CBS-2132 brewing simaltanously. Left side completing drip delay
Regular INFO © 5:30 °F 205 0:59	Brew completed (in drip delay) ←CBS-2131 CBS-2132 →	INFO Regular 1.00	CBS-2132 right side completing drip delay, left side ready for next brew

Programming-operator access programming

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

They 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.

Menu screen displayed		Accessing Programming		nu screen displayed		Accessing Programming menu screens
CBS_	2130	Turn unit "OFF" After 10 second delay:	· <	PROGRAM	>	←Top line is programming category
FET	CO	Pre-check will display: "DC voltage calibration for pumps is runningPlease waitCalibration is successfully done". Turn unit "ON"	*	Batch 1 Left	>	← Second line displays items for programming
© 2012 a reser Ready		"HOME" Screen on left will appear Immediately place finger on	44	EXIT	>>	Right and left hand arrows will scroll to the screens that display "Program, General, Inputs, Outputs and Other".
☐ Filling (FETCO "HO	to unlock	screen and "HOLD" Screen on right will appear		•		Down arrow enters the individual programming items shown below

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

PROGRAM Batch 1 Left	GENERAL Tank Temp.	Display Inputs	OUTPUTS Left Pump	OTHER Error Codes
		EXIT IN		EXIT P
Programming Category	Programming Category	Programming Category	Programming Category	Programming Category
PROGRAM	GENERAL	INPUTS	OUTPUTS	OTHER
Items for Programming	Items for Programming	Items for Programming	Items for Programming	Items for Programming
Batch 1 LEFT*	Tank Temp	Display Inputs	Left Pump	Error Codes
Batch 2 Left**	Brew At Temp	Calib Touch Scr	L.Bypass Pump*	Display Errors
Batch 3 Left **	Unit of Meas.		Right Pump	Reset Errors
Batch 4 Left **	Volume		R.Bypass Pump*	Copy Program
Batch 1 RIGHT*	ECO Mode		Fill Valve	From SD to B
Batch 2 Right **	Logo Timeout		Heater	From B to SD
Batch 3 Right **	Brew B.Sensor		Screen	Upload Logo
Batch 4 Right **			*Bypass option is only on	Res to Factory
Batch Copy			1 gallon airpot version	Firmware

Menu Features: Batch Parameters

Menu Features:				
PROGRAM Batch 1 LEFT*	Programming ItemsBatch Summary	Factory set Default Display Summary	Programming Range	Notes
	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]	3.03 liter [·
	Brew Time	4:00 mm:ss	4:00 mm:ss [] 2:00	
	Spray Pattern	Wide	Wide Wide Middle Narrow	
	Nr Of Pulses	8	8 1 30	
	Prewet Perc.	0%	0 % _[] 0 15	
	Prewet Delay	0:00 mm:ss	1:30 mm:ss [] 0:00 1:00	
	Bypass Perc.	0%	0 % _[] 0 40	Bypass option is only on 1 gallon airpot version
	Drip Delay	1:30 mm:ss	1:30 mm:ss [[] 0:30 5:00	
Batch 2 Left**	**Batch 2-4—Righ	nt and Batch2-4—Lef	t may be individually selected	d-or-entirely deleted
<u> </u>	Batch ON/OFF	ON	ON	
	Batch Summary	Display Summary		
	Batch Name	Regular 1	Regular 1-16;Write own name	
	Batch Volume	3.03 liter [0.94-4.73]	ON [] ON OFF	
	Brew Time	4:00 mm:ss	4:00 mm:ss 	
	Spray Pattern	Wide	Wide L[] Wide Middle Narrow	
	Nr Of Pulses	8	8 1 10	
	Prewet Perc.	0%	0 %	
	Prewet Delay	0:00 mm:ss	0:00 mm:ss	
	Bypass Perc.	0%	0 % _[] 0 40 1:30 mm:ss	Bypass option is only on 1 gallon airpot version
	Drip Delay	1:30 mm:ss	1.30 Hill.ss []	
Batch 3 Left **	(See Batch 2-Left)			
Batch 4 Direkt *	(See Batch 2-Left)			
Batch 1 Right * Batch 2 Right **	(See Batch 1-Left) (See Batch 2-Left)			
Batch 3 Right ** Batch 4 Right **	(See Batch 2-Left) (See Batch 2-Left)			
Batch Copy	Copy From Batch	L1	L1-L4;R1-R4	
	Copy To Batch	L1	L1-L4;R1-R4	
	Copy?	L1→L2? (example)	NO	
*Batch 1&4 cannot be	disabled. (CBS-2132); *Batch	1 cannot be disabled. (CB		l, 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 [] Gallons Liters	
Logo Timeout		1:00 mm:ss	1:00 mm:ss _[] 0:00 5:00	
Brew B. Sensor		NORMAL	NORMAL L[] NORMAL OVERRIDE	

INPUTS	Programming Items	Factory set Default	Programming Range (display)	Notes
Display Inputs	• Input Summery		Brew Basket Sensor High Liquid Level probe High Tank Temperature Probe Lower Tank Temperature Probe SD Card Recognized USB Drive Recognized	
Cal. Touch Scr		Calibrate	Calibrate	If <u>Yes</u> : Follow directions on the touch screen

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	

BREW AT TEMPERATURE DEFINITONS BREW AT TEMP: AUTO Regular 3 (DEFAULT: FACTORY PROGRAMMED INTO BREWER) 3.05 This allows the "BREW START" to active. If the hot water G 5:30 tank is at the selected temperature—the brew will start. 205 If the temperature is too low, the brewer will wait until the proper temperature is reached. A screen (example to the 198°F 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. BREW AT TEMP: ON USER SELECTABLE CBS_2132 "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 © 2012 all rights selected temperature. The screen at right displays when the "BREW AT TEMP" is selected. ☐ Ready Tank T. 'F 192 □ Filling **BREW AT TEMP: OFF USER SELECTABLE** Allows brewing at any temperature above 179°F/82°C. (Not recommended)

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 L[] YES NO	Setup upload ———————————————————————————————————
	• From B to SD	Brewer→ SD	Brewer→ SD L[] YES NO	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 [] 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 [] YES NO	Firmware upload ———————————————————————————————————

ERROR CODES

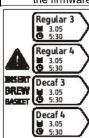
Error code 50: Shorted temperature probe

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



OUTPUTS	Programming Items	Factory set Default	Programming Range (display)	Notes
Left Pump	• Left Pump Test	(Press to test)	TEST Press To Test	Runs pump to verify flow. Have container under brewbasket!
" " "	• L. Pump Calib	Calibrate *Flow Rate	0.49 <u> </u>	Factory or service use for flow rate
L.Bypass Pump*	Left BP Pump Test	(Press to test)	TEST Press To Test	Runs pump to verify flow. Have container under brewbasket!
,, ,, ,,,,	L. BP Pump Calib	Calibrate *Flow Rate	0.49 <u> </u>	Factory or service use for flow rate
Right Pump	Right Pump Test	(Press to test)	TEST Press To Test	Runs pump to verify flow. Have container under brewbasket!
,, ,, ,, ,,	R. Pump Calib	Calibrate *Flow Rate	0.49 <u> </u> <u> </u> 0.39 0.59	Factory or service use for flow rate
R.Bypass Pump*	Right BP Pump Test	(Press to test)	TEST Press To Test	Runs pump to verify flow. Have container under brewbasket!
,, ,, ,, ,,	Colib *Clay Data			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 10	
	• S. Brightness	Brightness	8 1 10	

^{*}Bypass option is only on 1 gallon airpot version

*How to calculate flow rate

Measured → 2.90

---- = 0.96

Set Point → 3.00

If flow rate setting is 0.49

Then <u>new flow</u> rate is

0.49 X 0.96=**0.47**

By entering the new flow rate number into the brewer, the software will correct the discrepancy in the pump.

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

Adjustable spray pattern

This FETCO equipment features digitally adjustable spray patterns for perfect penetration

FETCO CBS-2131 and CBS-2132 coffee brewers feature digitally adjustable spray patterns for perfect penetration. All batches can be set for wide, middle or narrow spray patterns of the hot brew water that showers the coffee bed in the brewbasket. The turbulence created by the spray pattern combined with variable pulses is infinitely adjustable for desired flavor extraction of individual roasts and grinds of any coffee variety.

The default setting for all batches is WIDE. The brewer software calculates and corrects to achieve proper volume based on the flow rate changes of the spray pattern.

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.	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 BRI BAS	W BREW # 3.05	Brewbasket must be in place	Insert brewbasket	7)Follow directions shown on screen. Toggling ON/OFF switch will not clear error codes. Error codes must be cleared!

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

Airpot use instructions and cleaning

Dispenser Diagram



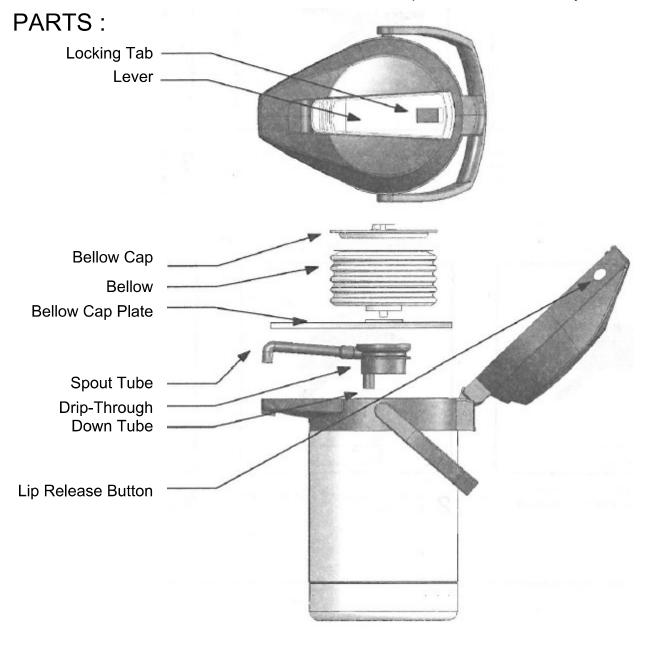
FETCO
DRIVEN TO INNOVATION

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 against the airpot dispenser Locator (if featured).
Align the center of the airpot Drip-Through with the outlet of the brewbasket.

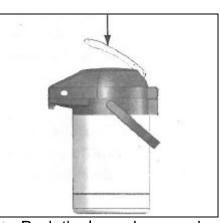
To Dispense:



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.



3 Push the lever downwards multiple times to dispense the desired amount

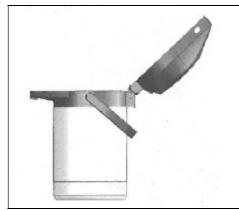
Dispenser Cleaning & Maintenance





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

To Clean:

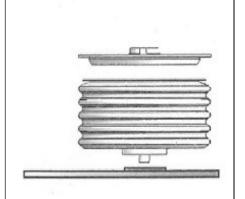


1 Squeeze the Lid Release Buttons to release the lid. Press the Lid Detach Button that will completely detach the lid.

Remove the Lid Cover.



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



3 Carefully 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.



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 equipment.

FETCO_® CBS-2130 COFFEE BREWING SYSTEM

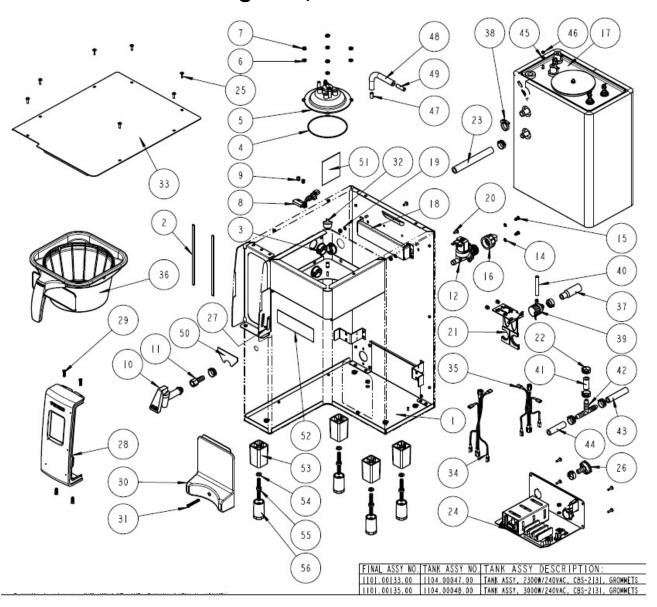
Complete Commercial Parts Listing

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

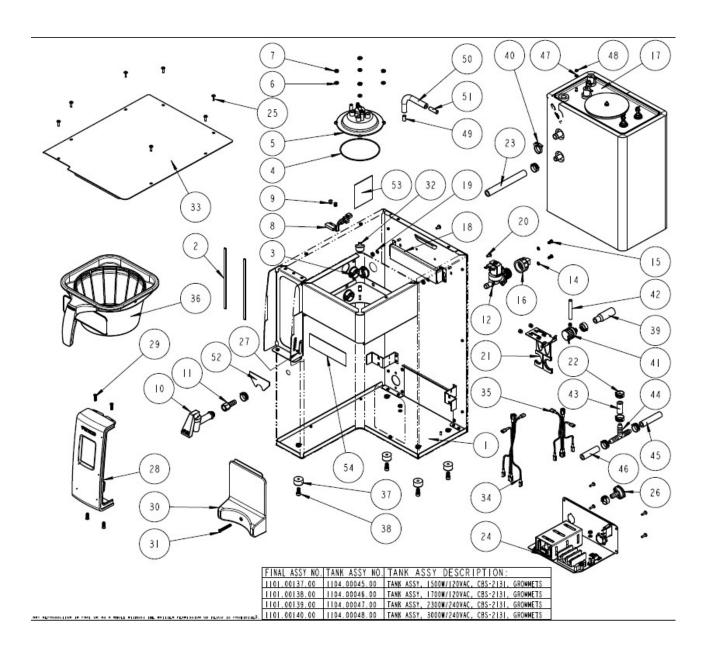
NEW September, 2012

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

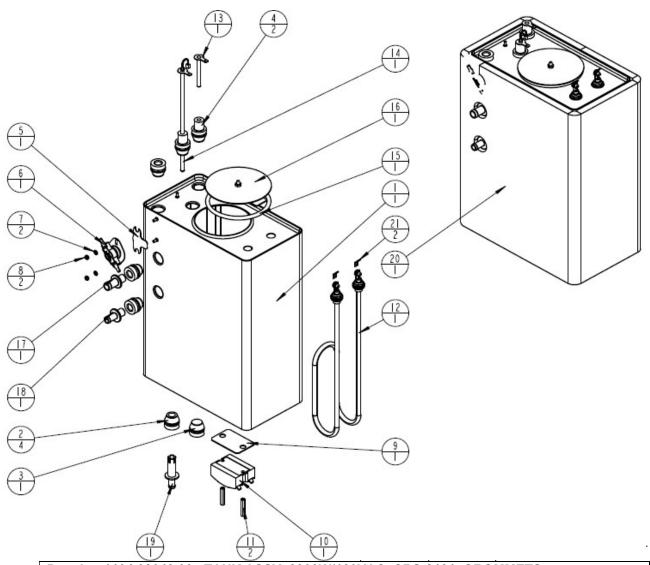
Parts diagrams, bill of materials lists



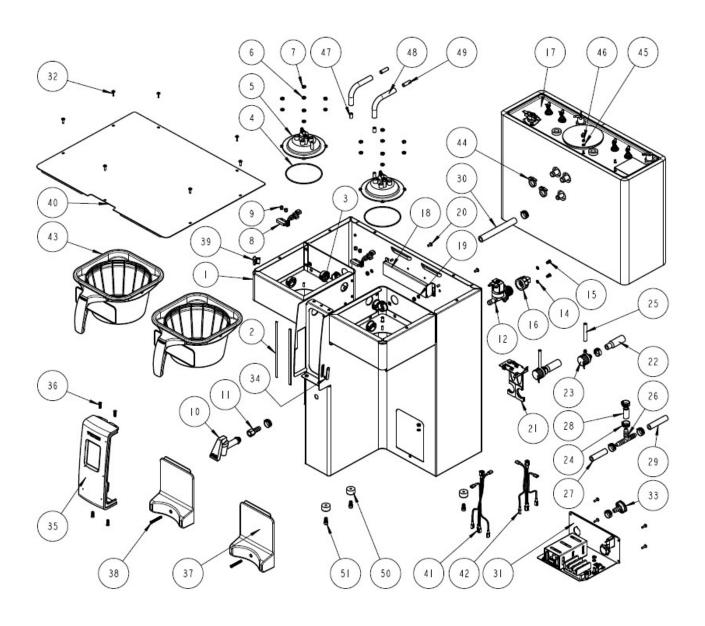
Drawir	Drawing 1101.00128.00 CBS-2131ASSEMBLY, 1gallon NO BYPASS, 2.3kW/120VAC				
Ref#	Qty	Part number	Description		
1	1	1111.00030.00	WELDMENT BODY, CBS-2131		
2	2	1024.00049.00	EDGE PROTECTOR, 7.00"LG, CBS-2130		
3	3	1086.00004.00	BUSHING, SNAP, 1" MOUNTING HOLE		
4	1	1024.00017.00	O'RING, 3.739" ID X 0.070" CS, 70 DURO, BUNA "N", FDA		
5	1	1102.00183.00	SPRAY HOUSING ASSEMBLY, CBS-2130		
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	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	1				
14	2	1083.00005.00	WASHER, M4 18-8 INTERNAL TOOTH LOCKWASHER		
15	2	1082.00010.00	SCREW, M4x10 ZINC PLATED PAN PHILLIPS MACHINE		
16	1	1102.00164.00	ADAPTER ASSY, 3/4" BSP X 1/4 SAE FLARE		
17	1	1104.00043.00	TANK ASSY, 2300W/120VAC, CBS-2131, GROMMETS		
18	1	1112.00163.00	WELDMENT TANK LOCK BRACKET, CBS-2100		
19	4	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK		
20	2	1082.00023.00	SCREW, #8-32 X 3/8 TRUSS HD PHIL., MACHINE		
21	1	1102.00187.00	PUMP BRACKET AND HOLDER ASSEMBLY		
22	9	1086.00003.00	UNICLAMP, 15.9 HOSE OD CLAMP		
23	1	1025.00063.00	TUBE, 5/8'OD X 3/8"ID X 8.50"LG		
24	1	1102.00181.00	ASSEMBLY BACK PANEL, CBS-2130		
25	11	1082.00017.00	SCREW, # 6-32 X 1/2" TRUSS HD PHIL., MACHINE		
26	1	1023.00147.00	PLUG, TANK SERVICE DRAIN FOR 18GA AND UP BODY		
27	1	1024.00040.00	CARD PLUG, HWD-2100		
28	1	1102.00190.00	ASSEMBLY FRONT PANEL, CBS-2100		
29	4	1082.00058.00	SCREW, # 8-32 X 5/8, FLAT HD, PH, 18-8 SS		
30	1	1102.00182.00	ASSEMBLY, LOCATOR CBS-2130		
31	1	1082.00065.00	SCREW #8-32 X 1 1/2", FLAT HD PH, 18-8 SS		
32	1	1082.00063.00	CORNER INSERT		
33	1	1112.00168.00	WELDMENT, TOP COVER, CBS-2131		
34	1	1402.00034.00	HARNESS, HIGH AMP, CBS-2131		
35	1	1402.00034.00	HARNESS, LOW AMP, CBS-2131		
36	1	B012280B1	BB ASSY, 13"X5", .280" DIA. HOLE, BLK HNDL		
37	1	1024.00052.00	CONNECTOR, BREW PUMP		
38	1		CLAMP, HOSE, SIZE "G" NYLON		
39	1	1086.00002.00 1055.00001.00	PUMP, HOT LIQUID		
40	1	1025.00012.00	TUBE, 5/16'OD X 3/16"ID X 11.00"LG		
41	1	1025.00012.00	TUBE, 9/16'OD X 5/16"ID X 2.75"LG		
42	1	1029.00002.00	FITTING, HOSE BARB TEE, SIZE 3/8", NYLON		
43	1	1025.00058.00	TUBE, 9/16'OD X 5/16"ID X 25.00"LG		
44	1	1025.00058.00	,		
44	1		TUBE, 9/16'OD X 5/16"ID X 3.25"LG		
45	1	1083.00009.00 1084.00010.00	WASHER, #6 SCREW , INTL TOOTH LOCKWASHER NUT, HEX, #6-32, UNDERSIZED, ZINC PLATED		
			· · · · · · · · · · · · · · · · · · ·		
47	1	1025.00006.00	TUBE, VENT SUPPORT, 5/16" OD X 3/16" ID X 1/2" LG		
48		1025.00064.00	TUBE, 1/2 OD X 1/4 ID X 9.00 LG		
49	1	1013.00073.00	TUBE, 5/16" OD, 1" LONG		
50	1	1046.00006.00	LABEL, WARNING, "HOT WATER FAUCET"		
51	1	1044.00004.00	LABEL, DANGER, HIGH VOLTAGE		
52	1	1046.00003.00	LABEL, CSD WARNING, 1.5" X 5.0"		
53	4	1023.00163.00	LEG BODY, CBS-2130		
54	4	1083.00021.00	WASHER, 1/4" SCREW SIZE, SPRING LOCK		
55	4	1112.00158.00	WELDMENT, LEG ROD, CBS-2130		
56	4	1021.00017.00	LEG INSERT THREADED, CBS-2130		



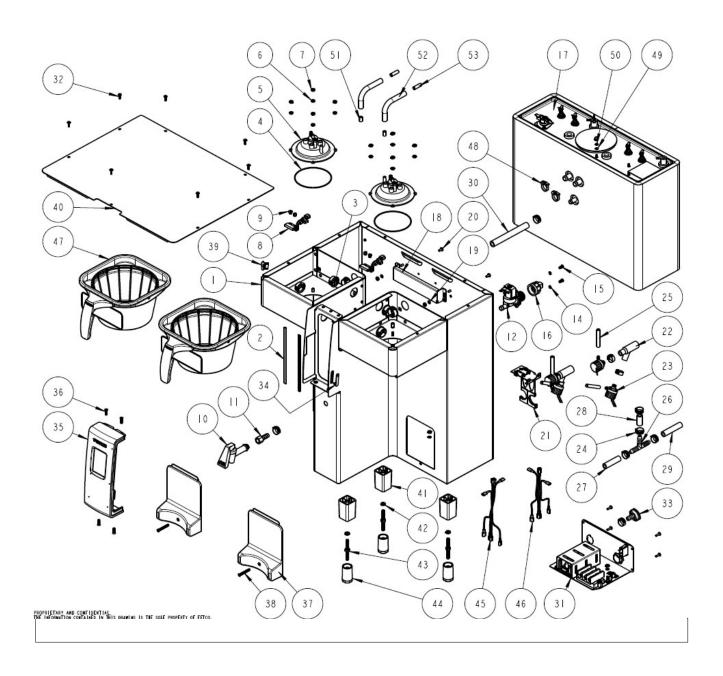
	Draw	ing 1101.00127.00	CBS-2131ASSEMBLY, 3 Liter NO BYPASS , 2.3kW/120VAC
Ref#	QTY	PART NO	DESCRIPTION
1	1	1111.00030.00	WELDMENT BODY, CBS-2131
2	2	1024.00049.00	EDGE PROTECTOR, 7.00"LG, CBS-2130
3	3	1086.00004.00	BUSHING, SNAP, 1" MOUNTING HOLE
4	1	1024.00017.00	O'RING, 3.739" ID X 0.070" CS, 70 DURO, BUNA
5	1	1102.00183.00	SPRAY HOUSING ASSEMBLY, CBS-2130
6	4	1083.00010.00	WASHER, #8 SCREW SIZE 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	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	1	1007.00040.00	OCELIACID VALVE, CHACLE, 100 DEC, 244 DO
14	2	1083.00005.00	WASHER, M4 18-8 INTERNAL TOOTH LOCKWASHER
15	2	1082.00010.00	SCREW, M4x10 ZINC PLATED PAN PHILLIPS MACHINE
16	1	1102.00164.00	ADAPTER ASSY, 3/4" BSP X 1/4 SAE FLARE
17	1	1104.00043.00	TANK ASSY, 2300W/120VAC, CBS-2131, GROMMETS
18	1	1112.00163.00	WELDMENT TANK LOCK BRACKET, CBS-2100
19	4	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK
20	2	1082.00011.00	SCREW, #8-32 X 3/8 TRUSS HD PHIL., MACHINE
21			· · · · · · · · · · · · · · · · · · ·
	1	1102.00187.00	PUMP BRACKET AND HOLDER ASSEMBLY
22	9	1086.00003.00	UNICLAMP, 15.9 HOSE OD CLAMP
23	1	1025.00063.00	TUBE, 5/8'OD X 3/8"ID X 8.50"LG
24	1	1102.00181.00	ASSEMBLY BACK PANEL, CBS-2130
25	11	1082.00017.00	SCREW, # 6-32 X 1/2" TRUSS HD PHIL., MACHINE
26	1	1023.00147.00	PLUG, TANK SERVICE DRAIN FOR 18GA AND UP BODY
27	1	1024.00040.00	CARD PLUG, HWD-2100
28	1	1102.00190.00	ASSEMBLY FRONT PANEL, CBS-2100
29	4	1082.00058.00	SCREW, # 8-32 X 5/8, FLAT HD, PH, 18-8 SS
30	1	1102.00182.00	ASSEMBLY, LOCATOR CBS-2130
31	1	1082.00065.00	SCREW #8-32 X 1 1/2", FLAT HD PH, 18-8 SS
32	1	1023.00159.00	CORNER INSERT
33	1	1112.00168.00	WELDMENT, TOP COVER, CBS-2131
34	1	1402.00034.00	HARNESS, HIGH AMP, CBS-2131
35	1	1402.00035.00	HARNESS, LOW AMP, CBS-2131
36	1	B012280B1	BB ASSY, 13"X5", .280" DIA. HOLE, BLK HNDL
37	4	1073.00008.00	FOOT, CBS-2130
38	4	1082.00066.00	SCREW 1/4-20 X 1/2", SOCKED HD CUP
39	1	1024.00052.00	CONNECTOR, BREW PUMP
40	1	1086.00002.00	CLAMP, HOSE, SIZE "G" NYLON
41	1	1055.00001.00	PUMP, HOT LIQUID
42	1	1025.00012.00	TUBE, 5/16'OD X 3/16"ID X 11.00"LG
43	1	1025.00061.00	TUBE, 9/16'OD X 5/16"ID X 2.75"LG
44	1	1029.00002.00	FITTING, HOSE BARB TEE, SIZE 3/8", NYLON
45	1	1025.00058.00	TUBE, 9/16'OD X 5/16"ID X 25.00"LG
46	1	1025.00060.00	TUBE, 9/16'OD X 5/16"ID X 3.25"LG
47	1	1083.00009.00	WASHER, #6 SCREW, INTL TOOTH LOCKWASHER
48	1	1084.00010.00	NUT, HEX, #6-32, UNDERSIZED, ZINC PLATED
49	1	1025.00006.00	TUBE, VENT SUPPORT, 5/16" OD X 3/16" ID X 1/
50	1	1025.00064.00	TUBE, 1/2 OD X 1/4 ID X 9.00 LG
51	1	1013.00073.00	TUBE, 5/16" OD, 1" LONG
52	1	1046.00006.00	LABEL, WARNING, "HOT WATER FAUCET"
	1		
53		1044.00004.00	LABEL, DANGER, HIGH VOLTAGE
54	1	1046.00003.00	LABEL, CSD WARNING, 1.5" X 5.0"



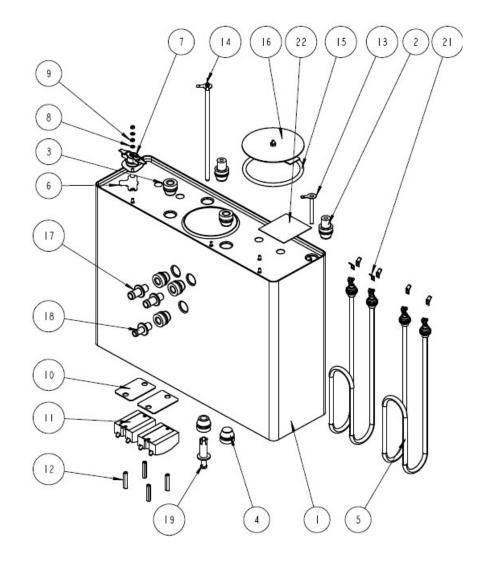
Draw	Drawing 1104.00043.00 TANK ASSY, 2300W/120VAC, CBS-2131, GROMMETS				
Ref#	QTY	PART NO	DESCRIPTION		
1	1	1114.00066.00	WELDMENT TANK CBS-2131, GROMMET DESIGN		
2	4	1024.00050.00	GROMMET, SILICONE, 11.4mm ID		
3	1	1024.00051.00	GROMMET, SILICONE, BLANK		
4	2	1024.00053.00	GROMMET, SILICONE, LL & TEMP. PROBES		
5	1	1003.00005.00	BRACKET, ONE SHOT THERMOSTAT		
6	1	1053.00003.00	THERMOSTAT, SINGLE SHOT, 240V/40A		
7	2	1083.00009.00	WASHER, #6 SCREW , INTL TOOTH LOCKWASHER		
8	2	1084.00010.00	NUT, HEX, #6-32, UNDERSIZED, ZINC PLATED		
9	1	1003.00140.00	ALUMINUM BRACKET FOR SSR		
10	1	1052.00014.00	ASSEMBLY RELAY, SOLID STATE, 25A/230V		
11	2	1081.00042.00	STANDOFF, 6-32 x1.25 LG.,1/4 HEX WIDTH		
12	1	1107.00021.00	HEATER ASSEMBLY, IMMERSION 1500W/120VAC		
12	1	1107.00022.00	HEATER ASSEMBLY, IMMERSION 1700W/120VAC		
12	1	1107.00019.00	HEATER ASSEMBLY, IMMERSION 2300W/120VAC		
12	1	1107.00020.00	HEATER ASSEMBLY, IMMERSION 2300W/240VAC		
12	1	1107.00018.00	HEATER ASSEMBLY, IMMERSION 3000W/240VAC		
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	1023.00167.00	FITTING, BREW, GROMMET DESIGN		
18	1	1023.00168.00	FITTING, HOT WATER, GROMMET DESIGN		
19	1	1023.00166.00	FITTING, COLD WATER INLET, GROMMET DESIGN		
20	1	1022.00056.00	TANK INSULATION, CBS-2131e, GROMMET DESIGN		



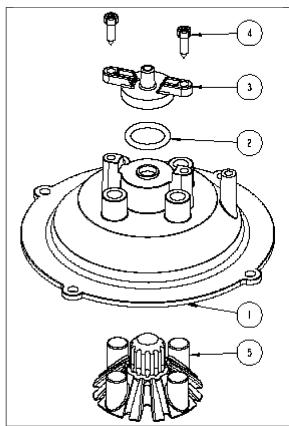
	Draw	ing 1101.001	32.00	CBS-2132-3 Liter	NO BYPASS	2 X 3kW/240VAC
Ref#	QTY	PART NO			DESCRIPTION	
1	1	1111.00029.00	WELDME	NT BODY, CBS-2132		
2	2	1024.00049.00	EDGE PR	OTECTOR, 7.00"LG, CBS	-2130	
3	6	1086.00004.00	BUSHING	S, SNAP, 1" MOUNTING H	OLE	
4	2	1024.00017.00	O'RING, 3	3.739" ID X 0.070" CS, 70 [DURO, BUNA	
5	2	1102.00183.00	SPRAY H	OUSING ASSEMBLY, CB	S-2130	
6	8	1083.00010.00		, #8 SCREW SIZE W/NEO	PRENE- BONDED SEAL	-
7	12	1084.00006.00	NUT, 8-32	2 18-8 HEX MACHINE SCF	REW	
8	2	1102.00113.00	SWITCH,	REED, ASSEMBLY		
9	6	1029.00006.00		LON FINGER NUT		
10	1	1071.00010.00	FAUCET	HPSC-BR-8 REGULAR HA	ANDLE	
11	1	1031.00003.00	FITTING,	BARB 3/8'ID x 1/4" FPT		
12	1	1057.00043.00	SOLENO	D VALVE, SINGLE, 180 D	EG, 24VDC	
13	1					
14	2	1083.00005.00	WASHER	, M4 18-8 INTERNAL TOC	TH LOCKWASHER	
15	2	1082.00010.00		M4x10 ZINC PLATED PAN		
16	1	1102.00164.00	ADAPTER	R ASSY, 3/4" BSP X 1/4 SA	AE FLARE	
17	1	1104.00044.00		SY, 2 X 3000W/240VAC, C		
18	1	1112.00163.00	WELDME	NT TANK LOCK BRACKE	T, CBS-2100	
19	4	1083.00011.00	WASHER	, #8 SCREW SIZE, INTER	NAL TOOTH LOCK	
20	2	1082.00023.00	SCREW,	#8-32 X 3/8 TRUSS HD PH	IIL., MACHINE	
21	1	1102.00187.00	PUMP BR	RACKET AND HOLDER AS	SEMBLY	
22	2	1024.00052.00	CONNEC	TOR, BREW PUMP		
23	2	1055.00001.00	PUMP, H	OT LIQUID		
24	10	1086.00003.00	UNICLAM	IP, 15.9 HOSE OD CLAMP		
25	2	1025.00012.00	TUBE, 5/1	16'OD X 3/16"ID X 11.00"L	G	
26	1	1029.00002.00	FITTING,	HOSE BARB TEE, SIZE 3	/8" , NYLON	
27	1	1025.00060.00	TUBE, 9/1	16'OD X 5/16" <mark>I</mark> D X 3.25"LG	l	
28	1	1025.00061.00	TUBE, 9/1	16'OD X 5/16" <mark>I</mark> D X 2.75"LG	l	
29	1	1025.00058.00	TUBE, 9/1	16'OD X 5/16" <mark>I</mark> D X 25.00"L	G	
30	1	1025.00063.00	TUBE, 5/8	3'OD X 3/8"ID X 8.50"LG		
31	1	1102.00181.00	ASSEMBI	LY BACK PANEL, CBS-21:	30	
32	11	1082.00017.00	SCREW,	# 6-32 X 1/2" TRUSS HD F	PHIL., MACHINE	
33	1	1023.00147.00	PLUG, TA	NK SERVICE DRAIN FOR	R 18GA AND UP BODY	
34	1	1024.00040.00	CARD PL	UG, HWD-2100		
35	1	1102.00190.00		LY FRONT PANEL, CBS-2		
36	4	1082.00058.00		# 8-32 X 5/8, FLAT HD, Ph	I, 18-8 SS	
37	2	1102.00182.00		LY, LOCATOR CBS-2130		
38	2	1082.00065.00		#8-32 X 1 1/2", FLAT HD P	H, 18-8 SS	
39	2	1023.00159.00	CORNER			
40	1	1112.00167.00		NT, TOP COVER, CBS-21	32	
41	1	1402.00032.00		S, HIGH AMP, CBS-2132		
42	1	1402.00033.00		S, LOW AMP, CBS-2132		
43	2	B012280B1		, 13"X5", .280" DIA. HOLE,	BLK HNDL	
44	2	1086.00002.00	· ·	HOSE, SIZE "G" NYLON		
45	1	1083.00009.00		, #6 SCREW , INTL TOOT		
46	1	1084.00010.00		K, #6-32, UNDERSIZED, Z		
47	2	1025.00006.00		ENT SUPPORT, 5/16" OD X	X 3/16" ID X 1/	
48	2	1025.00064.00		2 OD X 1/4 I D X 9.00 LG		
49	2	1013.00073.00		16" OD, 1" LONG		
50	3	1073.00008.00	FOOT, CE			
51	3	1082.00066.00	SCREW 1	I/4-20 X 1/2", SOCKED HD	CUP	



			1101.00131.00 CBS-2132, 2 X 3kW/240VAC, 1gal BYPASS
Ref#	Qty		gai a restaura de la caracteria de la ca
1	1	1111.00029.00	WELDMENT BODY, CBS-2132
2	2	1024.00049.00	EDGE PROTECTOR, 7.00"LG, CBS-2130
3	6	1086.00004.00	BUSHING, SNAP, 1" MOUNTING HOLE
4	2	1024.00017.00	O'RING, 3.739" ID X 0.070" CS, 70 DURO, BUNA
5	2	1102.00183.00	SPRAY HOUSING ASSEMBLY, CBS-2130
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	6	1029.00006.00	#4-40 NYLON FINGER NUT
10	1	1071.00010.00	FAUCET HPSC-BR-8 REGULAR HANDLE
11	1		
12		1031.00003.00	FITTING, BARB 3/8'ID x 1/4" FPT
	1	1057.00043.00	SOLENOID VALVE, SINGLE, 180 DEG, 24VDC
13	1	4000 00005 00	WARRIED MA 40 0 INTERNAL TOOTH LOCKWARDIED
14	2	1083.00005.00	WASHER, M4 18-8 INTERNAL TOOTH LOCKWASHER
15	2	1082,00010.00	SCREW, M4x10 ZINC PLATED PAN PHILLIPS MACHINE
16	1	1102.00164.00	ADAPTER ASSY, 3/4" BSP X 1/4 SAE FLARE
17	1	1104.00044.00	TANK ASSY, 2 X 3000W/240VAC, CBS-2132, GROMMETS
18	1	1112.00163.00	WELDMENT TANK LOCK BRACKET, CBS-2100
19	4	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK
20	2	1082.00023.00	SCREW, #8-32 X 3/8 TRUSS HD PHIL., MACHINE
21	1	1102.00187.00	PUMP BRACKET AND HOLDER ASSEMBLY
22	2	1024.00048.00	Y-CONNECTOR
23	4	1055.00001.00	PUMP, HOT LIQUID
24	12	1086.00003.00	UNICLAMP, 15.9 HOSE OD CLAMP
25	4	1025.00012.00	TUBE, 5/16'OD X 3/16"ID X 11.00"LG
26	1	1029.00002.00	FITTING, HOSE BARB TEE, SIZE 3/8", NYLON
27	1	1025.00060.00	TUBE, 9/16'OD X 5/16"ID X 3.25"LG
28	1	1025.00061.00	TUBE, 9/16'OD X 5/16"ID X 2.75"LG
29	1	1025.00058.00	TUBE, 9/16'OD X 5/16"ID X 25.00"LG
30	1	1025.00063.00	TUBE, 5/8'OD X 3/8"ID X 8.50"LG
31	1	1102.00181.00	ASSEMBLY BACK PANEL, CBS-2130
32	11	1082.00017.00	SCREW, # 6-32 X 1/2" TRUSS HD PHIL., MACHINE
33	1	1023.00147.00	PLUG, TANK SERVICE DRAIN FOR 18GA AND UP BODY
34	1	1024.00040.00	CARD PLUG, HWD-2100
35	1	1102.00190.00	ASSEMBLY FRONT PANEL, CBS-2100
36	4	1082.00058.00	SCREW, # 8-32 X 5/8, FLAT HD, PH, 18-8 SS
37	2	1102.00182.00	ASSEMBLY, LOCATOR CBS-2130
38	2	1082.00065.00	SCREW #8-32 X 1 1/2", FLAT HD PH, 18-8 SS
39	2	1023.00159.00	CORNER INSERT
40	1	1112.00167.00	WELDMENT, TOP COVER, CBS-2132
41	3	1023.00163.00	LEG BODY, CBS-2130
42	3		WASHER, 1/4" SCREW SIZE, SPRING LOCK
42	3	1083.00021.00	
44			WELDMENT, LEG ROD, CBS-2130
	3	1021.00017.00	LEG INSERT THREADED, CBS-2130
45	1	1402.00032.00	HARNESS, HIGH AMP, CBS-2132
46	1	1402.00033.00	HARNESS, LOW AMP, CBS-2132
47	2	B012280B1	BB ASSY, 13"X5", .280" DIA. HOLE, BLK HNDL
48	2	1086.00002.00	CLAMP, HOSE, SIZE "G" NYLON
49	1	1083.00009.00	WASHER, #6 SCREW, INTL TOOTH LOCKWASHER
50	1	1084.00010.00	NUT, HEX, #6-32, UNDERSIZED, ZINC PLATED
51	2	1025.00006.00	TUBE, VENT SUPPORT, 5/16" OD X 3/16" ID X 1/
52	2	1025.00064.00	TUBE, 1/2 OD X 1/4 ID X 9.00 LG
53	2	1013.00073.00	TUBE, 5/16" OD, 1" LONG



		TANU(400)(0. V 0000 N/O 40 V 4 Q 0 DQ 0400 0 DQ N 4 ETQ
	1		2 X 3000W/240VAC, CBS-2132, GROMMETS
REF#	QTY	PART NO	DESCRIPTION
1	1	1114.00062.00	WELDMENT TANK CBS-2132e, GROMMET DESIGN
2	2	1024.00053.00	GROMMET, SILICONE, LL & TEMP. PROBES
3	6	1024.00050.00	GROMMET, SILICONE, 11.4mm ID
4	1	1024.00051.00	GROMMET, SILICONE, BLANK
5	2	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	2	1003.00140.00	ALUMINUM BRACKET FOR SSR
11	2	1052.00016.00	ASSEMBLY RELAY, SOLID STATE, 50A/600VAC
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	1023.00168.00	FITTING, HOT WATER, GROMMET DESIGN
19	1	1023.00166.00	FITTING, COLD WATER INLET, GROMMET DESIGN
20	1	1022.00057.00	TANK INSULATION, CBS-2132e, GROMMET DESIGN
21	6	1065.00006.00	CONNECTOR, TAB, .250", FASTON
22	1	1044.00004.00	LABEL, DANGER, HIGH VOLTAGE



1	1102.00183.00 PCSD Pump Spray Housing Assembly Parts						
Ref.	QTY	PART NO	DESCRIPTION				
1	1	1102.00020.00	SPRAY HOUSING ASSY& MAGNETS, CSD DESIGN				
2	1	1024.00045.00	O-RING, 5/8 X 13/16, 3/32				
3	1	1023.00164.00	SPRAY HOUSING ADAPTER				
4	2	1082.00068.00	SCREW, M3.9x13, CHEESE PH., T/FORM				
5	1	1102.00019.00	CASCADE SPRAY DOME ASSEMBLY				

Complete CBS-2130 Spray Housing Assembly -Part number 1102.00183.00

