

WILBUR CURTIS Co., INC.

Service Manual - CAFEPC

Important Safeguards & Symbols

This appliance is designed for commercial use. Any servicing other than cleaning and maintenance should be performed by an authorized Wilbur Curtis service center.

- . DO NOT immerse the unit in water or any other liquid.
- To reduce the risk of fire or electric shock, DO NOT open the top panel. There are no user serviceable parts inside.
- Keep hands and other items away from hot parts of the unit during operation.
- · Never clean with scouring powders or harsh implements.

Symbols



WARNINGS - To help avoid personal injury



Important Notes/Cautions - from the factory



Sanitation Requirements

Your Curtis CAFE PC System is factory preset for optimal performance... right from the carton.

Following are the factory settings for your Primo Cappuccino Beverage System:

• Tank temperature = 190°F • Flavor controls = set at 50% · Dispensing mode set for manual dispensing Generally there will never be a reason to change the factory programming. However, should you need to make slight adjustments to meet your dispensing needs, programming instructions are provided later in this manual. System Requirements:

- Water source 20 90 psi (minimum flow rate of 1 gpm)
- Electrical: See attached schematic for standard model or visit www.wilburcurtis.com for your model.

Equipment to be installed to comply with applicable federal, state or local plumbing/electrical codes having jurisdiction.

SETUP INSTRUCTIONS

The unit should be level (left to right and front to back), located on a solid counter top. Connect a water line from the water filter to the brewer. NOTE: Some type of water filtration device must be used to maintain a trouble-free operation. (In areas with extremely hard water, we suggest that a sedimentary and taste and odor filter be installed.) This will prolong the life of your dispensing system and enhance cappuccino product quality.





Models Included

CAFE PC1

CAFE PC2

CAFE PC3

CAFE PC4

CAFE PC1 WITH LIGHT BOX

CAFE PC2 WITH LIGHT BOX

◆ CAFE PC3 ICED CAPPUCCINO

CAFE PC4 WITH LIGHT BOX

CAFE PC3 WITH LIGHT BOX

CAUTION: Please use this setup procedure before attempting to use

this appliance. Failure to follow the instructions can result in injury or the voiding of the warranty.



CAUTION: DO NOT connect this unit to hot water. The inlet valve is not rated for hot water.

ISO 9001:2008 REGISTERED

WILBUR CURTIS CO., INC. 6913 Acco Street Montebello, CA 90640-5403 For the latest information go to www.wilburcurtis.com

Tel: 800-421-6150 Fax: 323-837-2410 NSF International requires the following water connection:

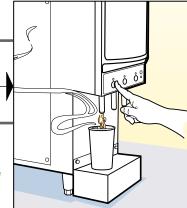
- A quick disconnect or additional coiled tubing (at least 2x the depth of the unit) is required so that the unit can be moved for
- 2. This unit must be installed with adequate back-flow protection to comply with applicable federal, state and local codes.
- 3. Water pipe connections and fixtures directly connected to a potable water supply shall be sized, installed and maintained in accordance with federal, state and local codes.
- 1. Connect a water line from your facility to the 1/4" flare water inlet fitting of the valve, behind the machine. The water volume going to the machine should be stable. Use tubing sized sufficient to provide a minimum flow rate of one gallon per minute.
- 2. Plug the power cord into an electrical outlet rated at 20 A.
- 3. Switch on the toggle switch behind the unit that supplies power to the components in the machine. The display window and STOP/ WASH light on the front door will activate and the heating tank will start to fill.
- 4. Water in the heating tank will require about ½ hour to reach operating temperature (factory setting of 190°F). At this time the Ready
- 5. Remove and fill the canisters with powdered cappuccino mixes.

OPERATING INSTRUCTIONS

- 1. Choose a flavor. Place a cup under the spout beneath the desired flavor.
- 2. Push and hold the dispensing button for the desired flavor.
- 3. Release the button when the cup is 3/4 full.

FILL CANISTERS DAILY

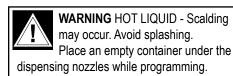
- 1. Open the front door to access the canisters.
- 2. Turn the product delivery elbows upward. Lift each canister up slightly, then out.
- 3. After filling, reposition the canisters in the machine, aligning the gear socket with the motor shaft in the back, then turning the product delivery elbows downward.



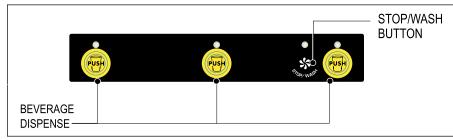
FOR THE LATEST SPECIFICATIONS AND INFORMATION GO TO WWW.WILBURCURTIS.COM

Steps to Programming

Your Curtis Cafe PC System is factory preset for optimal performance. Usually this does not change.



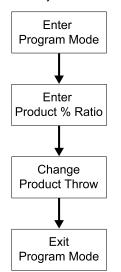
All programming is performed at the control panel (illustration, right). The **STOP/WASH** button has several functions. This button is used to stop a portion control dispense cycle. It is also used to



wash out the mixing and dispensing systems and to enter programming functions.

Product % Ratio

This function controls the amount of dry product that is metered from the hoppers. It can be programmed from 10% to 100% of the capacity of the dispensing system. By counting LED flashes you can determine the product % ratio currently set for each dispense button (see table).



Enter program mode – Press and hold the **STOP/WASH** button for about ten [10] seconds, until all the lights start blinking.

To program the product % ratio - Press and hold the selected **PUSH** button for approximately one second, then release. The current setting will be indicated by LED flashes.

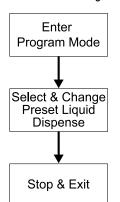
PRODUCT RATIO				
Number of				
Flashes	Volume			
1	10%			
2	20%			
3	30%			
4	40%			
5	50%			
6	60%			
7	70%			
8	80%			
9	90%			
10	100%			

To change the product throw - Press and hold the button until the light starts quick flashing. Each quick flash increases the amount by 10%. Release the button when the desired throw amount is achieved. After releasing the button, the number of blinks represent the new setting.

To exit powder dispensing mode - Push any other PUSH button.

Portion Control Liquid Dispensing Mode

This program adjustment allows you to setup the machine to automatically dispense a preset volume of cappuccino product. When the user makes a **PUSH** button selection, the unit dispenses only the volume of cappuccino product programmed by the Portion Control Dispensing Mode. When setting the unit for Portion Control Dispensing, you lock out the manual dispense feature.



Enter program mode – Press and hold the **STOP/WASH** button for about ten [10] seconds, until all lights start blinking.

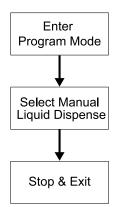
To select and change the portion control dispensing volume – While in the programming mode, press and hold the selected **PUSH** button until the liquid begins to flow, then release. The timing starts when liquid begins to flow.

Stop & exit – When 3/4 of the cup volume is achieved, press the **PUSH** button once again to stop dispensing. You have now set the timing for this button and have exited program mode. Pressing the dispense button now will provide the liquid volume that you just set. To reset the timing, you must start again by entering program mode.

Manual Liquid Dispensing Mode

This feature sets up the CAFE PC unit to dispense product only as long as the user holds down the selected **PUSH** button. As soon as the user stops pressing the button, product stops flowing into the cup. Setting the unit for Manual Liquid Dispense will turn off the Portion Control Dispense Mode.

Programming Continued ...



Enter program mode – Press and hold the **STOP/WASH** button for about ten [10] seconds, until all the lights on the control panel are blinking.

Set manual dispense – While you are in programming mode, press and hold the **PUSH** button.

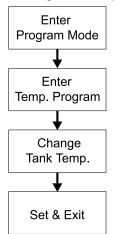
Hot liquid will start to flow. Continue to hold down the **PUSH** button until liquid stops flowing, then release the button.

At this time, you have selected the manual liquid dispensing mode and have exited out of program mode.

Confirm/Reset Temperature (factory set at 190°F . . . Cold Cappuccino set at 100°F)

These features allow you to check or change the heating tank temperature, if desired. The temperature in the tank is programmable from 80°F, in 5 degree increments up to 140°F, then the temperature will jump 45 degrees to 185°F and resume 2 degree increments up to a maximum 204°F (see Temperature Settings table, right).

To Change Tank Temperature



Enter program mode – Press and hold the **STOP/WASH** button for about ten [10] seconds, until all the lights on the control panel are blinking.

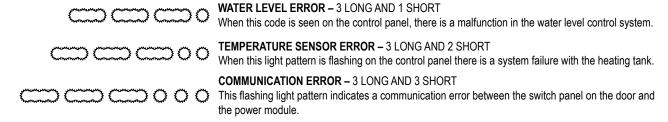
Enter temperature program mode – Press and hold the **STOP/WASH** button for approximately one second, then release. The current setting will be indicated by LED flashes.

To change the temperature - Release the **STOP/WASH** button, then press and hold it again. Each quick flash represents a temperature increase. See the Temperature Settings table for the actual temperatures. Release the **STOP/WASH** button when the desired temperature is reached.

To set & exit - Press one of the PUSH buttons.

Temperature Settings				
Number of				
Blinks	Temperature			
1	80°F			
2	85°F			
3	90°F			
4	95°F			
5	100°F			
6	105°F			
7	110°F			
8	120°F			
9	140°F			
10	185°F			
11	190°F			
12	192°F			
13	194°F			
14	196°F			
15	198°F			
16	200°F			
17	202°F			
18	204°F			

ERROR CODES: Curtis CAFE PC systems contain various safety features in the electronic circuitry that shut down the functions of the unit in the event of a system failure. Error codes are signalled by the **READY** light blinking one of three patterns:



Flushing the Whipper Chambers

Every three to four hours, or more often if necessary, flush the whipper chamber/dispensing system.

- A. Make sure power is ON.
- B. Press and hold the **STOP/WASH** button. Select one of the **PUSH** dispensing buttons and press. Hot rinse water will flush out the system. Release the **STOP/WASH** button when the water runs clear.
- C. Clean up any water that may have spilled.

Cleaning

- A. Switch off the unit at the power toggle switch, marked **CONTROL**, behind the unit.
- B. Wipe all exterior surfaces with a damp cloth; removing any spills, dust or debris from the unit.
- C. Remove the drip tray and louvered screen and wash out its contents. For hard to clean deposits, use a mild detergent solution.
- D. Clean around the dispensing area, wiping with a non-toxic cleaner.

Dump Valve Replacement



Curtis recommends that you regulate the water flow in the valve **ONLY** when replacing a valve.



WARNING - ELECTRIC SHOCK/BURN HAZARD. Be sure the power cord is disconnected before removing components. The following steps involve working near hot surfaces.

I. Instructions for replacing a valve:

- A. Shut off the water line running to the unit.
- B. Disconnect the power cord and turn off the toggle switch behind the unit.
- C. Drain approximately ½ to ¾ gallon of water from the tank by pressing one of the dispense buttons. This will insure that the water level is below the level of the valves. Remove the wires and water tubing from the defective valve and pull it from the silicone fitting.
- D. Before installing the valve on the tank, make an initial adjustment with the valve off of the tank.
 - 1. Loosen the screw on the metal guard. Rotate away from the adjustment screw (figure 1).
 - 2. Carefully, turn the flow adjustment screw clockwise all the way in (see figure 2). Observe restrictor position. Do not overtighten.
 - 3. Now turn the flow adjustment screw counter clockwise three turns (or 1½ turns from the fully open position).
 - 4. Replace the metal guard.
 - 5. Install the valve on the tank, attaching wires and silicone tube. Press the valve fully into the fitting on the heating tank.



Figure 1. Adjustment

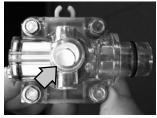


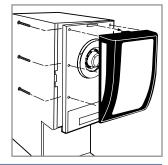
Figure 2. Restrictor Closed.

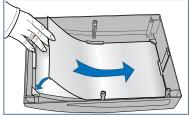
II. Dump valve, water flow adjustment:

The water flow is preset to ensure optimum mixing and proper chamber rinsing. The valves currently installed on your unit have been set at the factory and should not require adjusting. The factory flow rate setting is 8 oz. of water in 10 seconds (or 0.8 oz./sec.).

Replacing the Film in the Light Box

- 1. Turn OFF power and unplug the power cord.
- 2. Open the front door and remove the six screws that attach the light box.
- Pull off the light box assembly from the door. Detach at the hook at the top of the light box.
- 4. Take out the old film, unhooking it from the bottom tabs and sliding it out of the frame.
- 5. Insert the new film, slide it into the frame and hook it under the tabs to secure it.
- 6. Hook the light box on the front door. From inside the door, insert the six screws that were removed in step 2.
- 7. Close the front door, plug in the power cord and turn on the power. The light box should come on.
- 8. Check that the film lies flat and there is no light leaking from the edges.





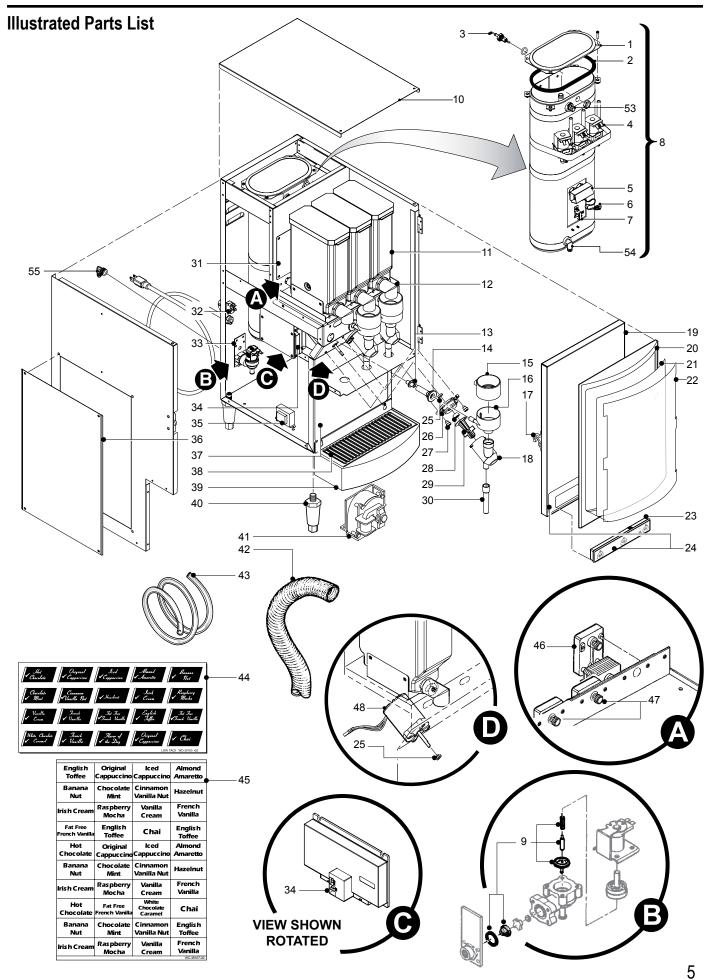
Whipper Plate Replacement

Shaft seals should be replaced with the grooved side facing outward.

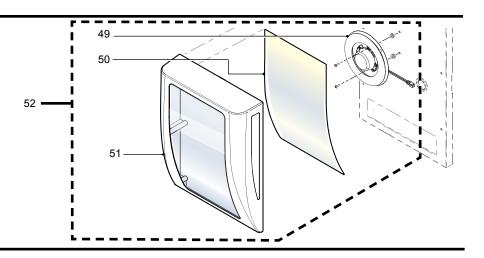


Before mounting a whipper plate, place a dab of food grade lubricant in the rear <u>hole</u> of the seal.





Illustrated Parts List Light Box Option

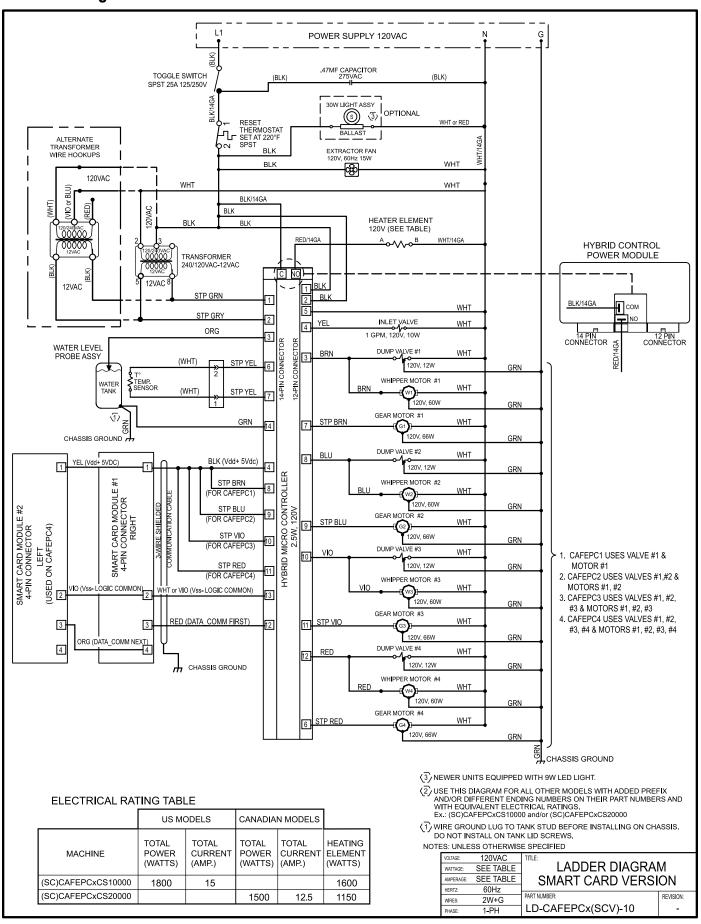


Illustrated Parts List

Item Nº	n Part Nº	Description	Item Nº	Part Nº	Description
1	WC-5853-102	COVER, TOP HEATING TANK GEN USE	25	WC-43791 ¹	RING, MOTOR SHAFT PLASTIC PC'S
_1A	WC-5851	COVER, TANK W/ NOTCHES (UNITS BEFORE 3/08)	_26	WC-37118 ¹	KIT, WHIPPER PLATE (3/PKG)
2	WC-43062 ¹	GASKET, TANK LID	27	CA-1024-05 ¹	PILLAR, LOCATION BLACK ALL PC'S
3	WC-5527K ¹	KIT, PROBE WATER LEVEL O-RING & NUT	28	CA-1076-04	SEAL, MOTOR SHAFT PC'S SOFT (20Pkg)
4	WC-3734 ¹	KIT, RPL DUMP VALVE WC-880E PC	29	CA-1008-07K ¹	KIT, PROP WHIP PKG/6 OFFSET BLADES PCGT'S/CAFEPC'S
5	WC-904-04 ¹	KIT,ELE, HEATING 1.6KW120V W/ JAM NUT & SIL O-RING	30	CA-1037-3Y ¹	TUBE, EXTENSION 3.0" LONG YELLOW ALL PCGT'S
6	WC-1438-101 ¹	SENSOR, TEMPERATURE TANK	31	WC-58142	COVER, DUMP VALVE CAFEPC1/CAFEPC2
7	WC-521 ¹	THERMOSTAT, HI-LIMIT SPST 120V 15A AUTO-RESET	31A	WC-58126	COVER, DUMP VALVE CAFEPC3
8	WC-62019	TANK, COMPLETE CAFEPC1 1600W 120V	32	WC-102 ¹	SWITCH, TOGGLE NON-LIT SPST 15A 125/6A 250V RES
8A	WC-62020	TANK, COMPLETE CAFEPC2 1600W 120V	33	WC-826L ¹	VALVE, INLET 1 GPM 120V 10W ALP/AP/TLP GREY BODY
8B	WC-6291	TANK, COMPLETE CAFEPC3 1600W 120V	34	WC-782K	CONT POW MD CAFEPC's 120V USE W/SMRT CRD SW CRD
	WC-62021	TANK, COMPLETE CAFEPC4 1600W 120V	35	WC-718-101	TRANS, ASSY 240/120VAC-12VAC 500mA PIGTAIL WIRES
9	WC-3765L ^{1, 2}	KIT, INLET VALVE REPAIR USE ON WC-826/WC-826L/WC-847	36	WC-58127	COVER, ACCESS SIDE CAFEPC'S
10	WC-58137	COVER, TOP CAFE PC1 & 2	37	WC-38295	LABEL, SPLASH PANEL CAFE PC1
10A	WC-7389	COVER, TOP CAFE PC3	37A	WC-38338	LABEL, SPLASH PANEL CAFE PC2 (NEW)
10B	WC-58151	COVER. TOP CAFEPC4	37B	WC-38288	LABEL, SPLASH PANEL CAFE PC3
11	CA-1111-06	CANISTER, ASSY 4LB CAFEPC's	37C	WC-38294	LABEL, SPLASH PANEL CAFE PC4
	CA-1124-06R	CANISTER, ASSY 7LB RT CAFEPC1	38	WC-66032	SCREEN, DRIP TRAY CAFEPC1 & 2
12	CA-1026-03	ELBOW, PC/CK/HC		WC-66033	SCREEN, DRIP TRAY CAFEPC3
13	CA-1095	CONNECTOR, ORIFICE WATER PLASTIC		WC-66034	SCREEN, DRIP TRAY CAFEPC4
14	CA-1011-05	BULKHEAD, WATER FITTING PCGT'S	39	WC-66035	PAN, DRIP TRAY PLASTIC CAFEPC1/CAFEPC2
15	CA-1005-03 ¹	STEAM TRAP, PC/CK/HC		WC-66037	PAN, DRIP TRAY PLASTIC CAFEPC4
16	CA-1009-03 ¹	BOWL, MIXING PC/CK/HC		WC-66040	KIT, DRIP TRAY & SCREEN ASSY CFEPC3
17	CA-1135	LATCH ASSY, DOOR SIDE MOUNT PCGT'S/CAFEPC'S/SD2'S	40	WC-3504 ¹	LEG, 2-1/2" TO 3" ADJUST BLK 3/8-16 THRD
18	CA-1006-06 ¹	CHAMBER, WHIPPER OFFSET PCGT'S	41	WC-37123	KIT, FAN EXTRACT 120V 29 CFM & BRACKET
19	WC-58185	DOOR, COMPLETE CAFEPC1(NEW)	42	CA-1030-19 ¹	HOSE, EXTRACTOR FAN 19" LONG ALL PC'S
19A	WC-58186	DOOR, COMPLETE CAFEPC2 (NEW)		CA-1030-17 ¹	HOSE, EXTRACTOR FAN 17" LONG ALL PC'S
19B	WC-58187	DOOR, COMPLETE CAFEPC3 (NEW)	43	WC-5310 ¹	TUBE, 5/16 ID x 1/8W SILICONE GEN USE
19C	WC-58188	DOOR, COMPLETE CAFEPC4 (NEW)	44	WC-39105-02	LABEL, FLAVOR LOW TACK DOOR GEN USE
20	CA-1129	COVER, DOOR SKIN CAFEPC1/2	45	WC-39107-02	LABEL, FLAVOR ADHESIVE CANISTR GEN USE
20A	CA-1130	COVER, DOOR SKIN CAFEPC3	46	WC-37174 ¹	KIT, GEAR MOTOR AND GEAR PCGT
20B	CA-1131	COVER, DOOR SKIN CAFEPC4	47	CA-1036 ¹	GEAR, PLASTIC PC'S USE ON CA-1013
21	WC-39613	FILM, DOOR DISPLAY CAFEPC1 GENERIC CURTIS NON-LIT	48	WC-3739 ¹	KIT, MOT WHIP ASSY PC'S MOT SCRWS & INST
21A	WC-39455	FILM, DOOR DISPLAY CAFE PC1&2	49	CA-1176K ¹	KIT, LAMP ASSY LED 120V 9W
21B	WC-39456	FILM, DOOR DISPLAY CAFEPC3	50	WC-39481	FILM, LIGHT BOX CAFE PC1/PC2 CURTIS
	WC-39457	FILM, DOOR DISPLAY CAFEPC4	50A	WC-39483	FILM, LIGHT BOX CAFE PC3 CURTIS
21D	WC-39493	FILM, DOOR DISPLAY HOT CHOCOLATE CAFEPC1 & 2 (OPTNL)	50B	WC-39482	FILM, LIGHT BOX CAFE PC4 CURTIS
	WC-39633	LABEL, DOOR DISPLAY ICED COFFEE CAFEPC3		WC-39611	FILM, LIGHT BOX CAFEPC1 CURTIS GENERIC
22	CA-1134	WINDOW, CLEAR FRONT CAFEPC4	50D	WC-39594	FILM, LIGHT BOX CAFE PC1/PC2 HOT CHOC (OPTNL)
22A	CA-1133	WINDOW, CLEAR FRONT CAFEPC3	51	CA-1137	LIGHT BOX ASSY CAFEPC1/CAFEPC2
22B	CA-1132	WINDOW, CLEAR FRONT CAFEPC1&2	51A	CA-1138	LIGHT BOX ASSY CAFEPC3
23	WC-722K	CONT BRD, SMRT CARD SWITCH ASSY COMP CAFEPC3	51B	CA-1139	LIGHT BOX ASSY CAFEPC4
23A	WC-732	CONT BRD, SMART CARD SWIT ASSY COMP CAFEPC1/2/4	52	WC-37272	KIT, ADD-ON LIGHT BOX ASSY CAFEPC1/2
	WC-722-101	PAN, SW 4 BUT 4 LEDS 6 PIN 120V CAFEPC3 (OLD UNITS)		WC-37234	KIT, ADD-ON LIGHT BOX ASSY CAFEPC3
24	WC-39497	LABEL, ASSY CONT PAN SMRT BRD & OUT PAN CAFEPC1		WC-37273	KIT, ADD-ON LIGHT BOX ASSY CAFEPC4
24A	WC-39498	LABEL, ASSY CONT PAN SMRT BRD & OUT PAN CAFEPC2	53	WC-37266	KIT, FITTING TANK OVERFLOW
	WC-39499	LABEL, ASSY CONT PAN SMRT BRD & OUT PAN CAFEPC3	54	WC-37365	KIT, FITTING TANK INLET
	WC-39500	LABEL ASSY CON PAN SMRT BRD & OUTER PAN CAFEPC4	55	WC-2401	ELBOW, 3/8 NPT X 1/4 FLRE PLTD
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¹ Suggested Parts to Stock ² Older Units

Electrical Diagram



Product Warranty Information

Wilbur Curtis Co., Inc. certifies that its products are free from defects in material and workmanship under normal use. The following limited warranties and conditions apply:

3 years, parts and labor, from original date of purchase on digital control boards.

2 years, parts, from original date of purchase on all other electrical components, fittings and tubing.

1 year, labor, from original date of purchase on all electrical components, fittings and tubing.

Additionally, Wilbur Curtis Co., Inc. warrants its grinding burrs for forty (40) months from date of purchase or 40,000 pounds of coffee, whichever comes first. Stainless steel components are warranted for two (2) years from date of purchase against leaking or pitting and replacement parts are warranted for ninety (90) days from date of purchase or for the remainder of the limited warranty period of the equipment in which the component is installed. All in-warranty service calls must have prior authorization. For authorization, call the Technical Support Department at 1-800-995-0417. Effective date of this policy is April 1, 2003. Additional conditions may apply. Go to www.wilburcurtis.com to view the full product warranty information.

CONDITIONS & EXCEPTIONS

The warranty covers original equipment at time of purchase only. Wilbur Curtis Co., Inc., assumes no responsibility for substitute replacement parts installed on Curtis equipment that have not been purchased from Wilbur Curtis Co., Inc. Wilbur Curtis Co., Inc. will not accept any responsibility if the following conditions are not met. The warranty does not cover and is void under the following circumstances:

- **Improper operation of equipment:** The equipment must be used for its designed and intended purpose and function.
- Improper installation of equipment: This equipment must be installed by a professional technician and must comply with all local electrical, 2) mechanical and plumbing codes.
- Improper voltage: Equipment must be installed at the voltage stated on the serial plate supplied with this equipment. 3)
- 4) **Improper water supply:** This includes, but is not limited to, excessive or low water pressure, and inadequate or fluctuating water flow rate.
- Adjustments and cleaning: The resetting of safety thermostats and circuit breakers, programming and temperature adjustments are the responsibility of the equipment owner. The owner is responsible for proper cleaning and regular maintenance of this equipment.
- Damaged in transit: Equipment damaged in transit is the responsibility of the freight company and a claim should be made with the carrier.
- Abuse or neglect (including failure to periodically clean or remove lime accumulations): Manufacturer is not responsible for variation in equipment operation due to excessive lime or local water conditions. The equipment must be maintained according to the manufacturer's
- Replacement of items subject to normal use and wear: This shall include, but is not limited to, light bulbs, shear disks, "O" rings, gaskets, silicone tube, canister assemblies, whipper chambers and plates, mixing bowls, agitation assemblies and whipper propellers.
- Repairs and/or Replacements are subject to our decision that the workmanship or parts were faulty and the defects showed up under normal use. All labor shall be performed during regular working hours. Overtime charges are the responsibility of the owner. Charges incurred by delays, waiting time, or operating restrictions that hinder the service technician's ability to perform service is the responsibility of the owner of the equipment. This includes institutional and correctional facilities. Wilbur Curtis Co., Inc. will allow up to 100 miles, round trip, per in-warranty service call.

RETURN MERCHANDISE AUTHORIZATION: All claims under this warranty must be submitted to the Wilbur Curtis Co., Inc. Technical Support Department prior to performing any repair work or return of this equipment to the factory. All returned equipment must be repackaged properly in the original carton. No units will be accepted if they are damaged in transit due to improper packaging. NO UNITS OR PARTS WILL BE ACCEPTED WITHOUT A RETURN MERCHANDISE AUTHORIZATION (RMA). RMA NUMBER MUST BE MARKED ON THE CARTON OR SHIPPING LABEL. All in-warranty service calls must be performed by an authorized service agent. Call the Wilbur Curtis Technical Support Department to find an agent near you.

ECN17221 3/16/16 10.5 rev P



6913 Acco Street, Montebello, CA 90640-5403 U.S.A.

Phone: 800-421-6150 | Fax: 323-837-2410 | Technical Support Phone: 800-995-0417 (M-F 5:30 A.M. - 4:00 P.M. PST) | Email: techsupport@wilburcurtis.com | www.wilburcurtis.com