

FACTORY TEST PROCEDURE NO. 6800020

CAFÉ 3 & 4 - FINAL TEST

PURPOSE: THE PURPOSE OF THIS QUALIFICATION TEST IS TO ENSURE THE MECHANICAL AND ELECTRICAL OPERATION, AND PHYSICAL APPEARANCE OF THE CAFÉ III AND CAFÉ IV MACHINES.

ASSEMBLY AFFECTED: CAFÉ III AND CAFÉ IV MACHINES, MODELS 680, 681, 682, AND 683

USAGE: THIS PROCEDURE IS USED TO FILL OUT THE CAFÉ III AND CAFÉ IV MACHINE INSPECTION SHEETS, PART NUMBER 6800021.

| | |
|-------------------------------------|-----------------------------------|
| revision date: | |
| issued by: <i>David Lang</i> | date issued: <i>5/26/00</i> |
| approved by: <i>Steve Hahn</i> | date approved: <i>04/14/00</i> |
| approved by: <i>Greg Stiller</i> | date approved: <i>5/11/00</i> |
| approved by: <i>Conn</i> | date approved: <i>5/30/00</i> |
| approved by: | date approved: |

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OPTIONAL TEST STEPS

This procedure lists all the steps necessary to test a fully configured machine. For those machines with fewer options, some of the test steps will not be required. These steps are marked as (optional) in the procedure, and should be skipped over when the hardware to be tested is not present.

WARNING
WATER IS HOT. USE CARE!

1. Perform high-pot test per instructions on the production line.
2. Record serial numbers from circuit boards and coin mech (if present).
3. Check exterior of unit for scratches, dents, door fit, and locking.
4. Check door, drain tray, and grounds tray for fit to cabinet and to each other.
5. Open door of unit. Set dip switches for appropriate machine configuration. Selections run right to left inside machine for 1, 2, & 3 (4). Refer to figure 1.

A. Configure the Machine

There are two sets of DIP switches (SW1 and SW2) on the service display board (mounted on the back side of the door) (Figure 1). *Please note that the switch settings shown are not necessarily correct for your particular machine.*

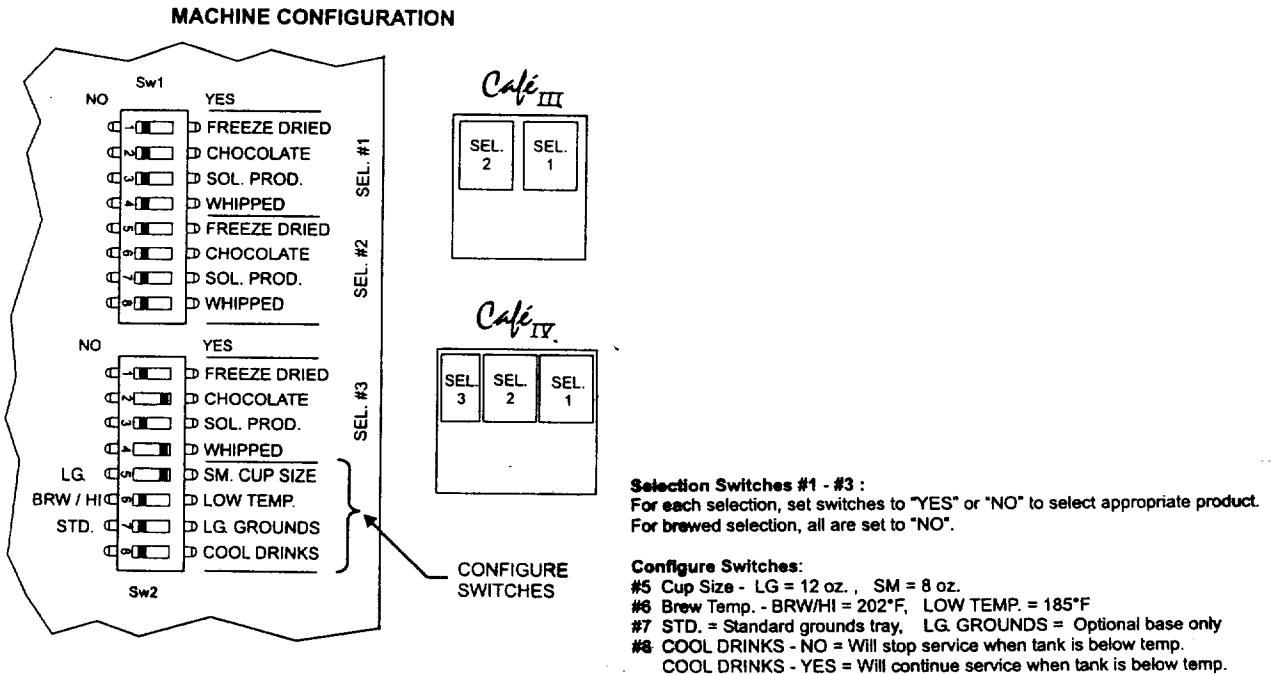


Figure 1

6. Place these switches in the YES or NO position, depending on the answers to the following questions:
 - A. Selections 1 - 3:
 - i. Is it freeze dried?

-
- ii. Is it chocolate?
 - iii. Is it a soluble product (for example, gourmet coffee)?
 - iv. Will it be whipped? (Applies only to non-brewed drinks.)
 - v. Answer those same four questions for the remaining selections in your machine.

NOTE

For a Café III, selection 3 DIP switches should all be set to the NO position because the Café III has two selections. For a Café IV, at least ONE of these MUST be set to the YES position to enable the third selection.

If selections 1 and 2 are fresh brewed, all switches for those selections should be in the NO position.

B. The following four switches are for miscellaneous configuration:

- i. Small cup size? A “yes” answer configures for the 8.25 oz cup size; a “no” answer configures for the 12 oz. cup size.
- ii. BREW/HI - LO TEMP switch. In a fresh brew machine, the BREW/HI position selects a 202° F water tank setpoint. The LO TEMP position selects a 195° F setpoint.

NOTE

In a freeze dried machine, the BREW/HI position selects a 195° F water tank setpoint. The LO TEMP position selects a 185° F setpoint.

- iii. Large grounds? A “yes” answer is large grounds; a “no” answer is small grounds. (The large grounds pail is only available with the optional base.)
 - iv. Are you going to serve cool drinks? (This allows the machine to dispense when the tank temperature is below the setpoint.) Note that this setting is NOT recommended for brewed drinks, because coffee quality deteriorates at temperatures below 185° F.
7. Check wiring on circuit boards for missed pins or missing harnesses (or miswired to wrong header).
 8. Verify the (optional) exhaust blower is running by feeling for airflow behind the machine.
 9. Verify all ingredient motor terminations are secure.
 10. Verify all tubing is routed properly.
 11. Verify that the unit is assembled with proper exhaust manifold.
 12. Install keypad and cover on door display.
 13. Connect water to machine. Check for leaks. (NOTE: Check valve and strainer assembly MUST be leak tested.)
 14. Plug in machine. Machine will power up. Red LED on PC board will light. Machine will begin filling with water.

15. Press and hold



| |
|---------------|
| Exit |
| Show Diag. |


 then

| |
|-------|
| Start |
| Edit |



. Machine will display current software version:

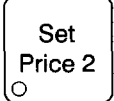
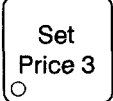

680.XX.

16. Press  until the display shows *INIT*. Hold  until the display shows *DONE*. (The display shows *CLR* while clearing.) The ready indicators next to the selection keys will be green, and flashing until the water tank fills and is up to temperature.




17. Press  until the display shows **tESt**.

18. If the optional monetary unit is installed, the service door display will show **EPrC**. This is a pricing error. Prices must be set to zero in the monetary unit as follows:

A. On the monetary unit keypad, press , then press  one time to set the price to *.00*.


B. Repeat this procedure for , , and .


C. When all prices are set to zero and no other errors exist, the display shows **NO.Er**.

D. Blend setup: Press . Scroll through the blend choices with  and .

Select *BL 1.2* for a 680 or 681.

Select *BL 1.3* for a 682 or 683.

Press . The display shows *C2.05* or *C3.05*.

E. Press  until the display shows *C2.50* or *C3.50*.

-
19. Four (4) red backlit service message windows are invisible until lit, displaying the error. Check these as follows:
- A. The paper switch must be adjusted using an empty paper core. The switch must be free to actuate with the core, but minimize the remaining filter paper (within .050 - .100 “). Verify proper switch function - The filter paper light will be lit with the core removed. **The switch must be adjusted so it does not bottom out with paper installed.**
 - B. Door open light will be on with switch in center, door open position. When switch is fully depressed or pulled out fully, light will go out. Verify this function.
 - C. Drain Tray. With drain tray full (water on both probes) or removed from unit (or not seated) the drain tray indicator will be on. With tray empty and seated (against switch) the light will be out. Verify this function. A wet sponge may be placed between probes to simulate a full tray. Pull out the tray to verify the tray indicator lights.
 - D. Grounds Tray. With grounds tray removed (not seated) the indicator light will be lit. Indicator will be off when grounds tray is seated in unit. Verify this function.
20. Perform test vends to measure water throw.
- A. Fresh Brew coffee selections are 220 ml.
 - B. Chocolate and soluble product selections are:
 - i. Freeze dried coffee: 200 ml
 - ii. Chocolate: 170 ml
 - iii. Soluble product: 180 ml
 - C. Water selection is 305 ml. (Must press and hold until water stops.)
Repeat throw and adjust water valves until the throw is correct:
21. As test vends are run, ensure that the whippers, augers, and valves assigned to that selection **and only that selection**, run. Run all whipped selections twice. (A whip error will only be displayed after two runs of the same selection.) If vending a blended selection, two sets of valves and augers will run except for a dual FB blend - then, only 1 valve will run.
- Models 681 and 683:** Set the F/D whipper switch to ON. Run selections to verify the whipper runs, then set the FD whipper to OFF.
22. While test vending brewed coffee, observe proper rotation of the auger that dispenses coffee (rotates clockwise as viewed from the front). Verify operations of water valve, pump (pumps product to cup), paper cutter (cuts and advances filter paper).
23. While test vending chocolate, observe the functions of the auger (rotates clockwise as viewed from the front), water valve, and whipper.
24. While test vending another soluble product, proper rotation of the auger that dispenses chocolate (rotates clockwise as viewed from the front). Verify operations of the water valve and, if set up, the whipper. The whipper should always be set with whipper on.

25. Test the service keys:

A. Rinse the mixing bowls:

- i. Put an empty container able to hold at least 24 ounces at the cup station. Press



The following occurs in sequence for all selections:

BREWED SELECTIONS:

- The brewer clamps.
- The water valve opens and the pump activates, flushing the brew barrel with water.
- The brewer unclamps; the filter paper advances. (A brewer jam error will be generated if the clamp and home switches are not properly detected.)
- The paper is cut. (A paper cutter jam error will be generated if the paper cut home switch is not detected.)
- The paper advances and the brewer homes itself.

NON-BREWED SELECTIONS:

- The water valve opens.
- For non-brewed selections, the mixing bowl and whipper (while running) are flushed with water.

B. Advance the filter paper:

- i. Press



- The brewer clamps.
- The brewer unclamps.
- The filter paper advances.
- The paper is cut. (A brewer jam error will be generated if the clamp or home switches are not properly detected.)
- The paper advances and the brewer homes itself.

NOTE

1. If the brewer is clamped when the key is pressed, the pump will run to empty the brewer before the brewer unclamps.
2. In case of a **PCUt** (paper cutter) error: If the cutter is in the home position, pressing



will clear the error only. If the cutter is off the home position, pressing



will run the cutter only. Once the cutter is in the home position, press





again to clear the error.


C. Show tank temperature:


- i. Press  to display the temperature in ° F.


D. Fill the tank:


- i. Press . Provided the upper (or upper AND lower) tank probe is dry, the tank inlet valve will open until liquid is detected by the upper probe.

26. Press . Any errors will be displayed:






27. Press . The strength for selection 1 is displayed. Repeat this step for selections 2 and 3.

28. Press . This key will display machine vend data.

29. Press . This key will display the steep times of brewed selections.

30. Press . This key displays the pump times for brewed selections.





Error Messages

| ERROR | DEFINITION |
|--|---|
| tEnP | Low tank temperature. All ready indicators will be flashing. This condition will occur upon initial installation. Heating time for a new installation is about 15 minutes. If a temp error occurs due to consecutive drinks being served, the recovery time is about 3-4 minutes. If the DIP switches are set to cool drinks, this error will not appear. |
| Lo.tA | Low tank water level. - Press  and wait for the water level to reach both tank level probes. |
| tAnC | Tank error. Occurs if the level probes do not detect a full tank within 3 minutes after attempting to fill the tank. - Check the water supply line and line filter for good pressure and flow rate. - Press  and wait for water to reach the level probes. |
| t.rEF | Temperature reference on the main PC board cannot be read. - Call for service. |
| SnSr | The temperature sensor is out of range or not detected. - Call for service. |
| br.Er | Brewer error. This error is displayed with a paper, grounds tray, or paper cutter error. Press  to see any other messages and follow the appropriate clearing procedure. |
| u 1 _ _ u _ 2 _ u _ _ 3 | Whipper for selection 1, 2, or 3 is jammed, causing that selection to be out of service. - Disassemble the mixing bowl, clean it and reassemble. Run a rinse cycle or turn the WHIPPED switch for that selection to the NO position to clear the error. |
| Pcut | The paper cutter is jammed. - Open the door and make sure the door switch has not been pulled out. Inspect the cutter and clear any paper or grounds that would prevent it from operating properly. Return the grounds tray to its fully seated position. Keeping your hands and clothing away from the brewing system, pull out the door switch. Press  to clear the error. Pull out the door switch and press  again to advance the paper. |
| Gr.tr | Grounds tray not fully seated. - Push the tray in to clear the message. |
| Gr.Ct | Grounds count. - Remove the grounds tray and dispose of any spent grounds and filter paper. Return tray to its fully seated position. |
| CnF 1 - - | A brewer has been detected but the switches for selection 1 indicates a non-brewed selection, or more than 1 non-brewed drink has been selected. |
| CnF - 2 - | Selection 2 is brewed, but selection 1 is not brewed, or more than 1 non-brewed drink has been selected. |





Error Messages (Continued)

| ERROR | DEFINITION |
|------------------|---|
| CnF - - 3 | Selection 3 is brewed, or more than 1 non-brewed drink has been selected. |
| Prob | The lower probe in the water tank shows an illegal condition. - Call for service. |
| Door | The front door is open. - Pull the door switch to clear the fault. CAUTION: Pulling the door switch will allow the brewer and paper cutter to operate. Keep your hands and clothing clear of the brewing system. |
| trAY | The liquid drain tray is not fully seated or it is full of liquid. - If the tray is full of liquid, remove the tray and empty it before returning it to its fully seated position. If the tray is empty, push it in to clear the fault. |
| Coin | A coin mech error has occurred. - Call for service. |



31. With a monetary unit installed, the price display in the ready mode displays *.00*. The price display will turn off if the machine door is opened.
32. Install test changer.
33. Press the coin return button on the front panel. The coin return drive should operate smoothly. Check and adjust the scavenger arm as necessary to engage changer.
34. With the changer empty, the "Use Exact Change" LED should be lit.




35. Press . The display shows the default value of *.00*. Use  and  to change the price to *.40* then press  to return to the ready mode.

36. Insert 1 nickel, 1 dime, & 1 quarter. Display should show *.40*. Make a buy from selection 1.
37. Insert 1 nickel, 1 dime, & 1 quarter. Press change return. All *.40* should be returned.

38. Press , , , . Verify that changer attempts to payout for each button that is pushed.



39. Perform the factory clearing procedure to set all prices to 0:



A. On the monetary unit keypad, press , then press  one time to set the price to *.00*.

B. Repeat this procedure for , , and .

C. When all prices are set to zero and no other errors exist, the display shows *NOER*.

-
40. Manually rotate the canister augers clockwise as looking at the dispensing end. Verify the auger and mixing wheels freely rotate. Verify the knurled thumb nuts for the agitator paddles are securely tightened.
 41. Apply all appropriate labels. Place the appropriate logo/instruction label in the bag assembly.

42. Press and hold  then . Machine will display current software version:

680.XX. Press  until the display shows *DATA*. Hold  until the display shows *DONE*. (The display shows *CLR* while clearing.) The ready indicators next to the selection keys will be green, and flashing until the water tank fills and is up to temperature.

43. Unplug the machine. Remove the water line.
44. Drain the tank and purge all the water lines.
45. End of test.