

Unit Serial Number _____ Date _____

Technician _____ Service Company _____

BCX14 Original Manual Control Preventative Maintenance Guide:

1. If Gas, does the unit have Blue Johnson Ignition Modules ○ : Or Fenwal Open Circuit Board Ignition Modules ○ : If Fenwal, ensure the modules have a dedicated ground from terminal 5 to ground.
2. Verify the Axial fan Operates if the cooling thermostat is heated past 110 Degrees F: Also verify it is clear and pulling cool air into the control panel.
3. What is the voltage of the disconnected Logic Board battery? (Panasonic 3V BR1225): _____ If less than 2.8, replace.
4. Does the flush disable thermostat open and close as required, alternating the state of the #1 LED. Also the flush disable thermostat should be wired with a brown and black wire, and the preheat thermostat should be wired to an orange and blue wire, if they are reversed, correct the wiring.
5. If Gas, inspect the heat exchanger gaskets by looking around the burners, through the back of the unit to verify there are no signs of water.
6. There are 3 generations of controls for water level in the boiler, the first is the float canister (50283) the second is the light grey level sensor, and the third is the black level sensor. If floats are present, they should be removed and de-limed as needed, If a light grey sensor is used, it should be replaced with the black level sensor, and if the black level sensor is used, the tube should be de-limed. To upgrade to the black sensor for Gas use 54159, for Electric use 54156.
7. In Steam Mode, operate the drain valve by pressing and holding the manual switch on the relay board, located next to D101 on the right side. The boiler should drain water as the button is pressed and stop draining and refill when the button is released. When the boiler is drained the Fill Light and LED 8 at the Logic Board should be lit, preventing the boiler from heating without water.
8. Verify the units Indicator Lights operate properly by following the steps below. (To replace the bulb, use 53136)
 - a. Fill Light - When performing step 7 above, the Fill Light should come on, if it does not, replace the bulb.
 - b. In Hot Air mode, set the Steam on Demand Potentiometer and Press the button, the Active Light should come on.
 - c. The Power Light should come on any time the unit is in Hot Air, Steam or Combi modes.
 - d. Set the unit to Steam Mode, turn the thermostat dial up to 500 and ensure LED 6 is lit on the Logic Board, If so the Call for Heat Light, shaped like a thermometer, should be lit.
 - e. To check the Delime Light, follow step 9 below.
9. To test the Delime Pump operation and direction, put the unit into Cool Down Mode, and Press and hold the Steam On Demand Button. The pump will operate and the Delime Light should flash.
10. Verify the Cavity Lights are functioning and not cracked. If they are in need of repair and they are rectangle, use 52959.
11. Check both hose reels for leaks, if the unit is a double stack, pay special attention to the top hose reel. If a hose reel is failed, use part number 39462. The new style hose reel will be blue, the original hose reel is black.

12. The door switch should be inspected for signs of contact with the activator mounted on the door. Any contact with the activator can cause damage and failure to the switch. Kit number 54228 replaces the activator with the new style spring steel type, and kit number 54273 includes the new style activator and a replacement door switch.

13. If the customer's Delime interval is not frequent enough and scale is building up in the boiler, increase the delime frequency by adjusting the potentiometer, R1, on the Logic Board. It is the left hand potentiometer below the CPU chip. turning all the way counter clockwise is 30 hours all the way clockwise is 90 hours and in the center of the swing is 60 hours. The logic board counts when LED 10 is on and LED 1 is off and when the clock reaches the set time, the Delime Light Flashes.

14. Verify the Probe Ohms, and the temperature controller functions including sound by: Turning the unit off and back to Hot Air, Steam or Combi. As the control counts down, (9,8,7...) Press and hold the start key for 5 seconds and then release it. The control should display ReOn, press ↑, the display will read 11:11; press Temp, the display will read 22:22; press ↓, the display will read 33:33; Press the Mode Key, the display will read 66:66; press the Stop/Clear key, the display will read 88:88 and as long as it is held the control should beep; press the Start Key, the display will read reOn and as long as it is held the heat demand indicator light should be lit as well as LED 6 at the logic board. When the start key is released the display will have the probe ohms displayed. Compare the display ohms to the cavity temperature taken by an independent pyrometer by using the chart below.

Temperature	Resistance
32	1000
68	1078
75	1090
86	1115
125	1195
140	1232
175	1310
200	1360
212	1386
250	1460
300	1575
356	1685
392	1758
450	1868
500	1978