



## Troubleshooting



### STBA48026

NGTB with Intergrated Sweet Tea Pump  
Shown with Tall Tea Dispenser (Sold separately)

Riser and Short Tea Dispenser  
(Tea Dispenser Sold separately)



### No Power - Display Not Lit.

1. Make sure circuit breaker for power receptacle is not tripped and is turned on.
2. Make sure that power cord is properly connected to power receptacle.
3. Make sure that main power toggle switch on back panel is turned on.
4. Is reset button on hi-limit switch "popped out?" If yes, reset it and check to see if unit operates.
5. Verify L1, L2, N and Gnd wires from power cord are properly connected to terminal block. Check to make sure wires are not burned/overheated. Check chassis ground.
6. Is there 220 Vac across input side of toggle switch? If no, check for bad wiring/bad connections between terminal block and switch.
7. Is there 220 Vac across output side of toggle switch, with it in the on position? If no, replace toggle switch.
8. Is there 220 Vac across input side of hi-limit switch? If no, check for bad wiring/bad connections between toggle switch and hi-limit switch.
9. Is there 220 Vac across output side of hi-limit switch with reset button pushed in? If no, replace hi-limit switch.
10. Is there 120 Vac across pins #8 and #16 at Molex connector on control module (UCM)? If yes, replace UCM. If no, check and/or replace wiring harness.

### Water Does Not Heat at All

- Is water level in tank in contact with water level probe? If no, See Tank Does Not Fill. Unit will not heat until water in tank is in contact with probe.
  - If water heats, but is not hot enough. See **Water Not Hot Enough** section.
1. Does Heating... appear on the display but water does not heat? If so, go to step 3.
  2. Does Ready to Brew appear on the display but water is not hot? If so, go to step 8.
  3. Is there 220 Vac across terminals of heating element. If yes, replace heating element.
  4. Is there 120 Vac from triac output terminal (A2) to ground? If yes, check wire between triac and heating element.
  5. Is there 120 Vac from triac input terminal (A1) to ground? If no, check wire between hi-limit switch and triac.

6. Is there 120 Vac from triac gate terminal (G) to ground? If yes, replace triac.
7. Is there 120 Vac across pins #6 and #7 at Molex connector on control module (UCM)? If yes, check wiring between UCM pin #6 and triac gate terminal. If no, replace UCM.
8. If Ready to Brew appears on the display but water is not hot, check resistance across leads of temperature sensor. If resistance is less than 10 k and water is not hot, replace temperature sensor. If temperature sensor resistance is above 10 k or more when water is not hot, replace control module (UCM).
2. If display reads Heating..." constantly, check resistance across leads of temperature sensor. If 10 k or more when water is hot, check the sensor wire for corroded/poor connections at control module (UCM). Also check sensor for proper mounting to tank. After checking mounting and connections to see if Ready to Brew appears on display when water is hot.
3. After performing step 2, if display still reads Heating..." constantly when water is hot, replace the temperature sensor panel, replace the temperature sensor.

### Water Not Hot Enough

1. If water heats, but is not hot enough, check for correct temperature setting on control panel. Reprogram as necessary. See page 4.
2. If temperature setting is OK, and actual water temperature does not match setting on the control panel, replace the temperature sensor.

### Over Temp Sensor Error Message

This error message indicates the control module has detected a water overheating problem. The control module is reading a temperature in the water tank above 210°F. If the water temperature is too hot, but the Over Temp Sensor error does not appear on the display, see Water Too Hot or Overheating. Once the malfunction causing the error is corrected, the error message must be cleared. To reset the control module and return to normal operation, turn the toggle switch on the back of the unit to the off position for 5 seconds, then back on.

1. Check for constant continuity between triac input (A1) and output (A2) terminals. If continuity is present, replace triac.
2. Turn off power to unit and allow water tank to cool. Once cool, turn power back on while monitoring voltage at Gate terminal of triac. During normal operation, voltage at gate terminal should be 120 Vac (to gnd) until water is hot, then drop to nearly 0. Control module (UCM) should be replaced if gate voltage reads 120 Vac constantly until Over Temp Sensor appears on the display and shuts unit off.
3. If UCM is operating normally, check for a false over-temp error caused by temperature sensor. Check resistance across leads of temperature sensor. If resistance is less than 10 k when water is cool, replace temperature sensor.

### Water Too Hot or Overheating

1. Does the display read "Over Temp Sensor" appear on the display? If yes, go to Over Temp Sensor Error Message above.

### Sensor Error Message

Indicates a malfunction (open circuit) in temperature sensor system. Usually the screen will display a service call phone number. Once the malfunction is corrected, the error message must be cleared. To reset the control module and return to normal operation, turn the toggle switch on the back of the unit to the off position for 5 seconds, then back on.

1. Check resistance across leads of temperature sensor while disconnected from control module. If open circuit is measured (resistance above 200 k), replace sensor.
2. If sensor resistance is less than 200 k check the sensor wires for corrosion and reconnect to control module (UCM). Afterward, if error message comes back after resetting UCM, replace UCM.

### Water Tank Does Not Fill

1. Is water supply turned on?
2. Is there 120 Vac across the inlet valve terminals? If yes, replace inlet valve.
3. Check continuity of wires between control module (UCM) and inlet valve. Check for corroded connections.
4. Remove orange wire from the water tank probe. Does water tank start filling? If yes,

### Water Level Error Message

Water level fill error or overflow. This error message occurs when the inlet valve solenoid has been on for more than 10 minutes on initial fill or more than 30 seconds in normal operation (tank refill). Once the malfunction is corrected, the error message must be cleared. To reset the control module and return to normal operation, turn the toggle switch on the back of the unit to the off position for 5 seconds, then back on..

1. Disconnect water probe wire from probe and short to chassis ground. Does the water tank stop filling? If yes, replace water probe.
2. Check water probe wire for continuity or bad connection at control module (UCM). If wire and connection are OK, replace UCM.

## Water Tank Overfills

1. Does "Water Level Err" appear on the display? If yes, go to Water Level Error Message.
2. Does the water tank continue to fill after main power toggle switch is turned off? If yes, replace inlet valve.
3. Disconnect water probe wire from probe and short to chassis ground. Does water tank stop filling? If yes, replace water probe.
4. Check water probe wire for continuity or bad connection at control module (UCM). If wire and connection are OK, replace UCM.

## No Water Flows From Spray Head During Brewing

1. Make sure spray head is correctly aligned and that tubing is routed properly to allow for maximum water flow (no kinks). Adjust and secure as needed.
2. Verify that water level in water tank is at top of water tank probe. If not, see Water Tank Does Not Fill.
3. Is there 120 Vac across terminals of dump (brew) valve coil during brew cycle? If no, go to step 4. If yes, replace dump valve.

IMPORTANT: If replacing dump valve, measure the coil resistance with wires removed. If coil measures open circuit, replace control module (UCM) also.

4. With wires removed from dump valve coil, measure coil resistance. If less than 500 ohms, replace dump valve and UCM.
5. Check wires from UCM to dump valve for damage/bad connection. If OK, replace UCM.

## Dispenser/Pot Not Filled During Brewing

1. Check brew and dilution levels. Reprogram as necessary. See page 4.
2. Ensure that the spray head is clean and free of debris. Clean or replace as needed.

## Dispenser/Pot Overflows During Brewing

1. Check brew and dilution levels. Reprogram as necessary. See page 4
2. Is spray head missing? Replace as needed.
3. Ensure that tea container is empty before brewing.

## Dilution Water Does Not Flow During Dilution Portion of Brew Cycle

1. Is there 120 Vac across terminals of (chilled) dilution valve coil during dilution portion of brew cycle? If no, go to step 2. If yes, replace dilution valve. IMPORTANT: If replacing dilution valve, measure the coil resistance with wires removed. If coil measures open circuit, replace control module (UCM) also.
2. With wires removed from dilution valve coil, measure coil resistance. If less than 500 ohms, replace dilution valve and UCM.
3. Check wires from UCM to dilution valve for damage/bad connection. If OK, replace UCM.

## Dilution Water Flows Continuously

1. Does dilution water continue to flow continuously even when the toggle switch is turned off? If yes, replace (chilled) dilution valve.
2. If dilution valve turns on when toggle switch is on and turns off when toggle switch is off, replace control module (UCM). IMPORTANT: When replacing UCM, also check dilution valve coil for short or open conditions and replace as necessary.

## Sweetener Does Not Flow (at all) During Sweetener Mix Portion of Brew Cycle

Once the sweetener system is primed, the system uses up the left sweetener container (BIB) first. When the left bag is empty, the system switches to the right BIB. When the right BIB is used up, the system switches back to the left again (the left BIB having been replaced).

1. Do both BIBs contain sweetener and has power been reset? If not, replace empty BIB(s), then turn the toggle switch on the back of the unit to the off position for 5 seconds, then back on.
2. Press and hold PRIME button. Do sweetener pumps pump sweetener through the system, pumping from one BIB for 3 seconds, then the other, then repeat? If yes, unit operating normally.
3. Does the system pump from only one BIB when PRIME button is pressed or does Change Sweetener message remain on screen? If yes, go to Change Sweetener Message Does Not Go Off.
4. Check CO2/compressed air supply to sweetener pump system. Also check for kinks/obstructions in sweetener supply hoses.
5. Is there 120 Vac across each (both) of the sweetener valves (3 seconds on, 3 seconds off) while pressing the PRIME button? If no, check wiring harness between valves and the sweetener valve control module (SVCM).
6. Is there 120 Vac from pins 7 & 8 of the 8-pin connector to ground on the SVCM? If no, check wiring harness.
7. Is there 5 Vdc across pins 1 and 2 of the 4-pin connector on the SVCM? If yes go to step 8.
8. Is there 5 Vdc across pins 4 and 5 of 5-pin connector on universal control module (UCM)? If no, replace UCM, if yes, check wiring between UCM and SVCM.
9. Is there 5 Vdc across pins 1 & 2 of the 2-pin connector and pins 1 and 2 of the 4-pin connector on the pressure switch control module (PSCM)? If no to either, check the wiring between the UCM and the PSCM.
10. Check the continuity of the wire between pin 4 of the 4-pin connector on the PSCM and pin 3 of the 4-pin connector on the SVCM. Replace if defective.
11. Check the continuity of the wire between pin 1 of the 5-pin connector on the UCM and pin 3 of the 4-pin connector on the PSCM. Replace if defective. If no wiring problem is found, replace SVCM to see if problem is corrected. Then replace PSCM to see if problem is corrected. If replacing the smaller control modules does not correct problem, UCM is bad.

## Change Sweetener Message Does Not Go Off (Unit Pumps from Only One Sweetener BIB)

Once the sweetener system is primed, the system uses up the left sweetener container (BIB) first. When the left bag is empty, the system switches to the right BIB. When the right BIB is used up, the system switches back to the left again (the left BIB having been replaced).

1. Press and hold the PRIME button. Is there 120 Vac across the sweetener valve that has no output (3 seconds on, 3 seconds off)? If 120 Vac is not measured, go to step 4?. If 120 Vac is measured, check to see if the CO2/compressed air supply to the pump is OK.
2. Check the sweetener supply hose for kinks/obstructions.
3. Check output of sweetener pump. If pump output is OK, sweetener valve is bad.
4. If 120 Vac is not measured across sweetener valve that has no sweetener output, is there 120 Vac from pin 3 or pin 4 (8-pin connector) to ground on sweetener valve control module (SVCM)? If no, check wiring from SVCM to valve.
5. Is there 120 Vac from pins 7 and 8 of 8-pin connector to ground on the SCVM? If no, check wiring harness.
6. Does wiring between pressure switch and pressure switch control module (PSCM) have proper continuity? If no, replace wiring, if yes, either the pressure switch or the PSCM is bad.



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