

## Instruction Sheet

Follow these instructions to update Software and replace the Control Products touchscreen controller(s) with the Common Controller with a Cooling Fan/Shroud.

**Subject: 8263723 Burger King FQ4000 Control Products to Jabil Common Controller Replacement Instructions**

**Models affected: Burger King FQG30T, FQE30T, FQGLA Touch Fryers**

ALL steps **MUST** be completed to update the fryer properly before changing the controller(s). Complete the procedures in sequence and **DO NOT SKIP** any steps.

- The software files are on the USB flash drive included with this package.
- The software update process takes approximately 30 minutes to complete.
- **DO NOT** start the update process until you have at least 30 minutes when the fryer will not be in use.
- **Prior to replacing a touch screen controller, check the software version on the fryers. If the software versions DO NOT MATCH the versions in Step 8, the software MUST be updated using the supplied USB with software, before replacing the controller. If the versions match, proceed to Step 11 Replace the Controller.**

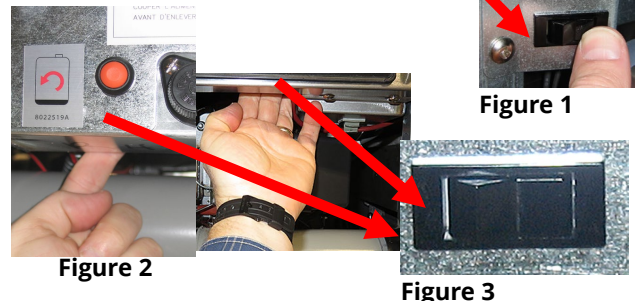
In This Kit		
Part #	Description	Qty
1089586SP	Common Controller w/ BK Software	1
8122668	USB with Software	1
8122650	USB, BK Menu	1
8197989BK	INSTRUCTIONS	1

### Step 1 – Check Product Availability

Ensure enough products are cooked to cover 30 minutes of operations while the fryer is updating.

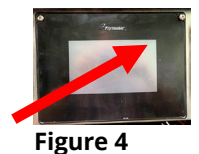
### Step 2 – Power Cycle the Fryer

To power cycle the system, **PUSH and HOLD** the black toggle reset switch for **60 SECONDS**. The reset switch is located either under the USB port, near the USB port or under the left control box (see Figures 1 through 3). If the switch is not accessible, unplug the fryer or turn off the breaker to the fryer.



### Step 3 – Pull the Filter Pan









Pull the filter pan slightly out from the cabinet until a "P" is visible on the top right corner of the display (see Figure 4).



### Step 4 – Turn OFF Fryers






Press the power button  on each display to ensure **ALL** controllers are **OFF**.

**Step 5 – Reset the fryer on the Left screen (NOTE: If the far-left controller is not operational, swap positions with another operational older style controller (see Figure 4), if mixing controller types. An older style controller MUST always be in the FAR-LEFT position when mixing controller types).**

1. On the **LEFT** screen, press  →  →  → 3000 →  →  → **FIB-RESET 2** → **YES**
2. **RESET COMPLETED SUCCESSFULLY** is displayed once the reset is complete. Press  →  →  **CREW MODE**
3. If a CAN COMMUNICATION FAILED error occurs, see Troubleshooting on the last page.

## Step 6 – Update the Software

The software only needs to be loaded in the USB port in the far-left fryer cabinet and it will update **ALL** the SIB and FIB boards in the system.

1. On the **LEFT** screen press  →  →  → 3000 →  → **TECH MODES** →  → **SOFTWARE UPGRADE**

2. **INSERT USB.** The USB port is located inside the **far-left cabinet, on the left-hand side**. Slide or lift the cover up to reveal the USB port (see Figure 5). These may differ in appearance.

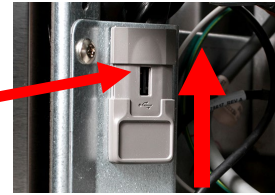


Figure 5

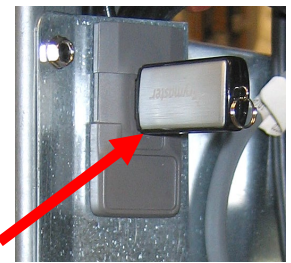


Figure 6




3. Insert the USB flash drive (see Figure 6).
4. The controller displays IS USB INSERTED? YES NO
5. Press the **YES** button after the USB flash drive is inserted.
6. Controller displays READING FILE FROM USB. PLEASE DO NOT REMOVE USB WHILE READING.
7. Controller displays READING COMPLETED, PLEASE REMOVE USB.
8. Remove the USB flash drive and lower cover over the USB slot.
9. Press the **YES** button after the USB flash drive is removed.
10. Press **YES** when the screen displays **CONFIRM CONTROLLERS AVAILABLE FOR UPGRADE UIB, SIB, VIB AND FIB - YES/NO.**
11. If instructed to do so, remove the USB flash drive and lower cover over the USB slot. If **NOT** instructed to do so, **DO NOT remove the USB drive until the entire software process is complete.**
12. Press **YES** when the screen displays **PROCEED WITH SOFTWARE UPDATE?" YES/NO.**
13. When the update has completed on **ALL** screens, press the **YES** button to confirm.
14. **REMOVE the USB drive from the USB port if it hasn't already prompted to remove.**
15. Power cycle the system as shown in step 2. **ENSURE THE SWITCH IS PRESSED AND HELD FOR 60 SECONDS. Failure to press and hold the reset switch long enough may cause an incomplete software update.**
16. While the fryer is rebooting some controllers may take up to 15 minutes to reboot while the software is loading.
17. After the power cycle, it may take up to 15 minutes to reboot. If the controller does not reboot after 15 minutes, the controller may need to be replaced. Once rebooted, the left screen may display **MENU UPGRADE REQUIRED.** The right screen will return to the **OFF** state. **DO NOT POWER ON! Powering on the fryer, prior to loading the MENU's, may disable the fryer!**

## Step 7 - Update the Menu **(ONLY IF NECESSARY-NOTE: It will erase all hand entered items on other controllers).**

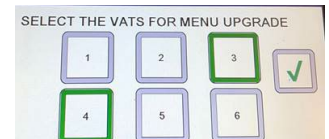
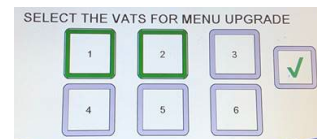
1. On the left screen press  →  →  → 3000 →  → **USB - MENU OPERATION** →


2. Insert the USB into the USB port.
3. Ask manager which products are cooked in each vat. Select the file name of the menu to update. Select BKFRIES.CBR for the fry vat(s). Select BKMULTI for the MULTI vat(s) with French Toast. Select the BKSPICY.CBR file for the MULTI vat(s) for Spicy Chicken products. **NOTE: If "INI FILE MISSING" is displayed, USB SETTINGS OPERATION was selected instead of USB MENU**

- BKFRIES.CBR
- BKMULTI.CBR
- BKSPICY.CBR

4. **OPERATION>COPY MENU FROM USB TO FRYER** selection. Press the  button, press the  button, press the  button and start over in step 1 of Step 4 - Update Menu.





4. Select the vats the selected file in previous step should update. Select **EVERY** vat if **ALL** vats are to be updated with the selected file (Example: If a 4-battery fryer should have all the vats updated to the same menu, select 1, 2, 3, & 4). If updating individual vats with different menus, **ONLY** select the vats to be updated (Example: If the selected menu should only update vats 1 and 2 only select and highlight 1 and 2. If a different menu file is desired for vats 3 and 4, then only select and highlight 3 and 4).





5. Press the check  button to begin menu update.
6. When the update has completed on all screens, press the **YES** button to confirm.

7. **Ensure the USB is removed from the fryer.**
8. To power cycle the system, push and hold the black toggle switch from step 2 on page 2 for **60 SECONDS**.
9. Repeat steps 3 thru 6 above to load additional menus.
10. Once complete, slide the USB cover down to cover the port.

**Step 8 – Verify the software update on EVERY touchscreen.**

1. On **ALL** the screens, press  →  →  → 

SOFTWARE VERSION
2. When the versions are displayed, confirm they all match the versions below:  
**UIC/B = 10.00.140**  
**SIB = 04.01.000 or 04.02.000 or 04.02.001**  
**VIB = 01.03.003**  
**FIB = 10.00.060**  
**IOB = 10.77.004**
3. If software versions match on **ALL** screens, press  and proceed to **Step 9 – Reposition the Filter Pan**
4. If software versions **DO NOT** match, press  and repeat **Step 6 - Update the Software**.

**Step 9 – Reposition the Filter Pan**

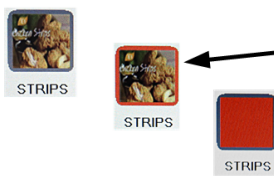

Push the filter pan back into the fryer until a **“P”** is **NOT** visible on the top right corner of the display.

**Step 10 – Verify Menu Update and Product location**

1. Power on all controllers.
2. Wait for all vats to heat to setpoint and all product images are displayed.
3. Press the menu button to advance from ALL RECIPES to BREAKFAST to LUNCH to CHANGEOVER.
4. Ensure products and images are in each menu.
5. If any current products or LTO (Limited Time Offers) are missing from menus, the products will need to be assigned to a location. Some products may need to be reprogrammed into each controller, as they may have been overwritten during the update.
6. Follow the instructions below to change product location assignment.

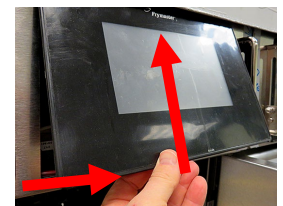
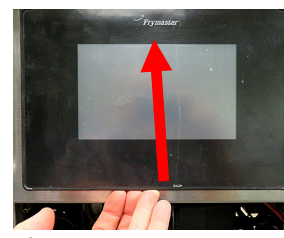
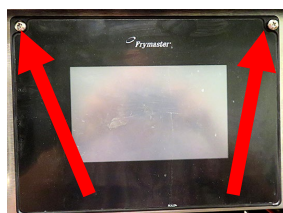
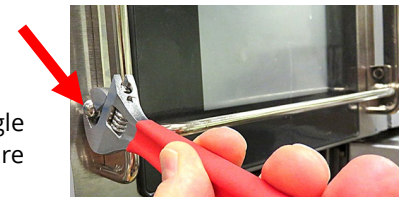
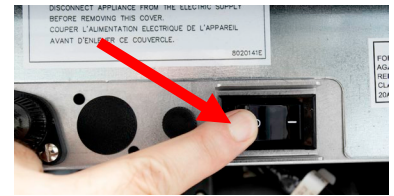
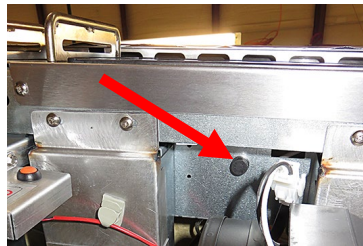
**Changing a Product**

Press and hold the product button to change. The outline of the button changes from green to red and then to solid red. Select another product.

**Step 11 – Replace the Controller**

1. Disconnect the fryer from the electrical power supply. On gas fryers the fuse located under the bottom of the control box, can be removed, to remove power from individual control boxes (see Figure 7). Turn the fuse cap to remove. On electrical fryers, the individual fryer can be switched off (see Figure 8).
2. Remove the acorn nuts, washer and plates on both ends of the guard if applicable (see Figure 9) and discard.
3. Slide one end of the guard up the rail at an angle until it can be removed if applicable (see Figure 10) and discard.
4. Remove the two Phillips head screws from the upper left and right corners of the controller (see Figure 11).
5. Slide the controller up to disengage it from the bottom of the bezel (see Figure 12).



6. Lift the controller out from the bezel (see Figure 13).
7. Lower the controller and rest it on the bottom of the control box (see Figure 14). The black tether on the right will support the controller
8. **Disconnect the RJ45 cable from the SIB board FIRST (see Figure 15).**
9. Disconnect the ground cable, the locator cable, the speaker cable and the USB cable from the far-left

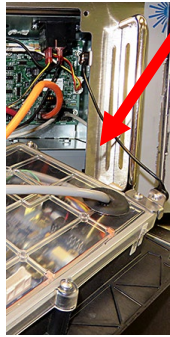


Figure 14

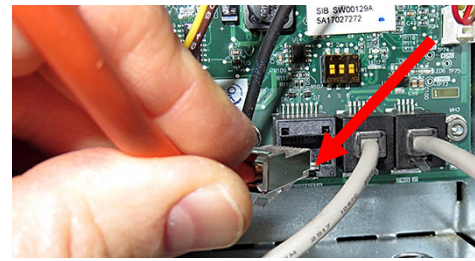


Figure 15

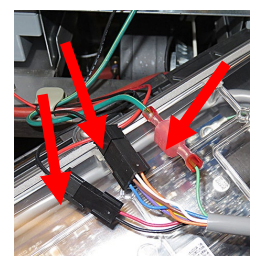


Figure 16

9. Disconnect the ground cable, the locator cable, the speaker cable and the USB cable from the far-left controller (if applicable) (see Figure 16). Tuck the single wire locator cable out of the way, as it is NOT used with the new controller.
10. Disconnect the lanyard tether from the frame (see Figure 17) to remove the controller.

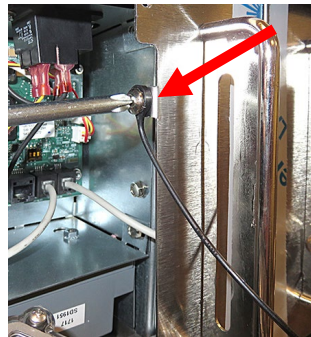


Figure 17



Figure 18

11. Remove the controller. The controller will slide up and out of the controller protector cage.

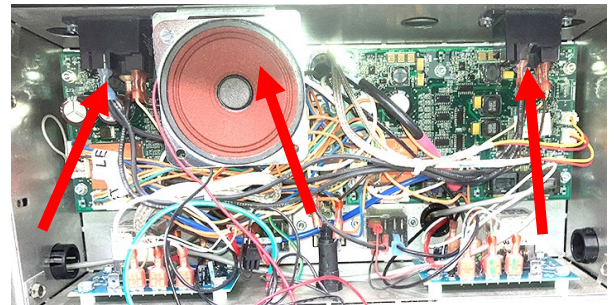


Figure 20

12. Remove the bezel by removing the two screws on the bottom of the bezel (see Figure 18) and tilting the bezel up from the bottom and lowering towards the front of the fryer (see Figure 19).

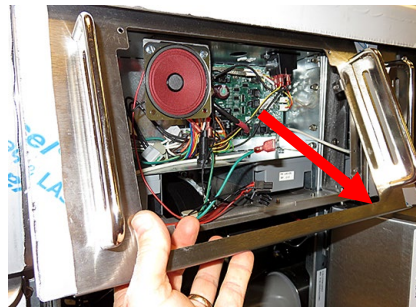


Figure 19

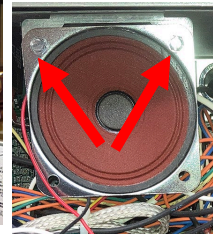


Figure 21

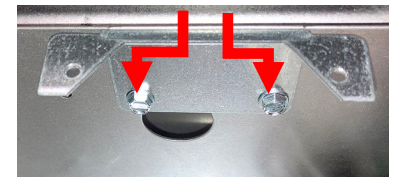


Figure 22

13. On gas fryers, the speaker bracket and relay(s) must be relocated towards the rear of the box to allow room for the cooling housing (see Figure 20). On electric fryers, the speaker bracket can be bent down towards the SIB board (see Figure 24). If electric, skip to step 19.



Figure 23

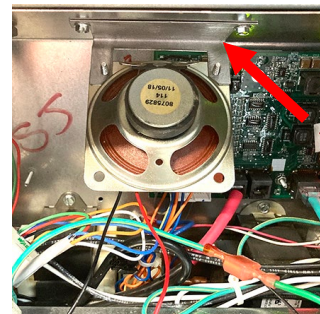


Figure 24

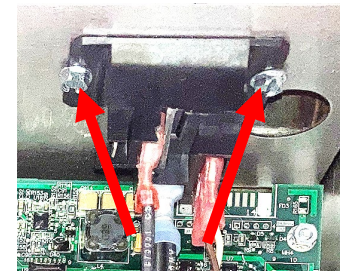


Figure 25

14. Remove the two (2) screws attaching the speaker to the bracket (see Figure 21).
15. Remove the two (2) screws attaching the speaker bracket to the component box (see Figure 22).
16. Reattach the speaker to the bracket (see Figure 23).
17. Rotate the speaker 180 degrees so the speaker is facing the rear of the component box and reattach the bracket to the component box using the screws and the existing holes (see Figure 24)
18. Remove the two (2) screws attaching the relay(s) to the top of the component box (see Figure 25). Relays in electric fryers may differ in appearance.

19. On gas fryers, using the supplied plate, attach the relay to the plate. Attach to the control box using the existing holes as shown (see Figure 26 & 26A).
20. Reattach the bezel removed in step 12
21. With the replacement controller face down resting in the control box, **reattach the lanyard tether FIRST**. Failure to reinstall the lanyard may result in damage to the SIB board connectors when connecting or disconnecting cables (see Figure 27).
22. Attach the speaker wire, the ground wire and the USB with the sleeve to the USB extension, if the controller is in the far-left position on the fryer (see Figure 28).

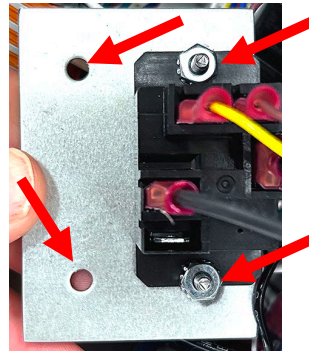


Figure 26

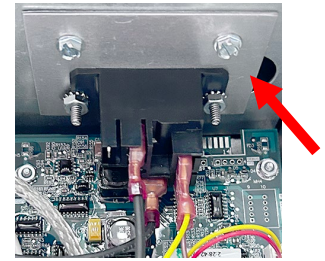


Figure 26A

**NOTE: NEW controllers without locator plugs have two (2) USB connectors. If attaching to the USB extension on the far-left controller, attach the USB connection with the sleeve (see Figure 29).**

23. Attach the RJ45 cable to the SIB board (see Figure 30).
24. Restore power to the associated controller.
25. Wait a minute or more to ensure the cooling fan on the top of the controller is functioning before attaching the controller to the bezel.



Figure 27

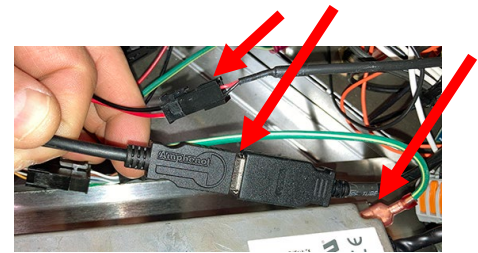


Figure 28

26. Attach the controller to the bezel reversing steps 4, 5 and 6. Attach using the two (2) screws removed in step 4.
27. For new controllers without a locator wire, the Vat ID must be set up correctly to operate correctly and avoid a duplicate Vat ID error. At bootup, if a **DUPLICATE BOARD VAT ID** is detected, **ALL** controllers display the VAT ID setup screen (see Figure 31). Select the correct VAT ID for **each vat**. Vat ID #1 is far left controller. Vat ID #2 is the next controller to the right, etc. If changes are required, go to Service>Service>3000>Tech Modes>Select Vat ID. Ensure the Vat ID is set up for correct vat ID number. Once all VAT IDs are selected, power cycle the fryer battery using process in Step 2 on the first page.



Figure 29

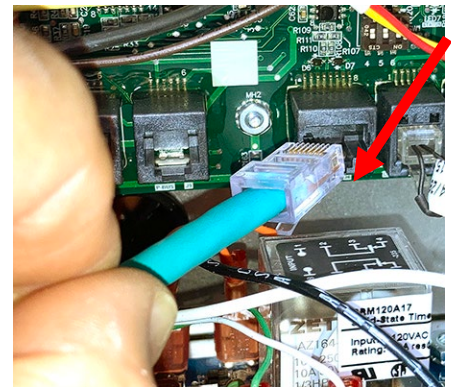


Figure 30

28. Setup the controller (locale, energy type, vat type, oil system type, waste oil type, etc.) by going to Settings>Service>3000. If the controller being replaced is in the far-left position, the current date and time and Lane Assignments need to be setup by going to Settings>Service>3000. Setup **MUST** be performed prior to readdress.
29. Once setup is complete on **all** replaced controllers, CYCLE POWER TO **ENTIRE** FRYER SYSTEM using process in Step 2 on the first page again.
30. Check software version by pressing the information (?) button; press the down arrow; press the SW version button. The controller displays INTIALIZING. **Ensure that the FQ4000 (UIB)/VIB/FIB/SIB/OQS software versions match the versions on the other controllers. If the software versions do NOT match, update the software again.**
31. The newer controllers are brighter and crisper than older style controllers. Do not adjust settings. **See Next Page for Troubleshooting Assistance.**

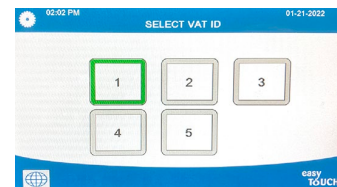


Figure 31

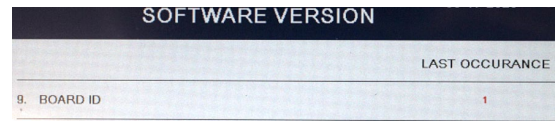
# Troubleshooting

## CAN COMMUNICATION FAILED, CAN COMMUNICAITON ERROR DURING UPDATE OR SOFTWARE THAT FREEZES DURING AN UPDATE.

1. Try updating the software again but ensure that only controllers with software that **DOES NOT MATCH** the software on the first page, are located in the far-left position when updating software. Any controller that has software that matches the software version on the first page, needs to be disconnected while updating the software and located in any position other than the far-left controller.
2. Power cycle fryer ensuring that the reset switch is pressed and held for 60 seconds or greater, or power is removed for 60 seconds or greater.
3. Update the software or menus again.
4. Check software versions or menus. If they still do not update repeat step #1 and recheck.

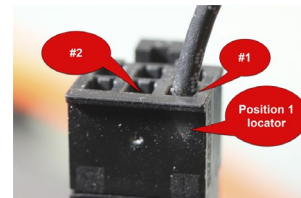
### Software upgrade not available (Grayed out)

1. Ensure **ALL** controllers are **OFF**.
2. Ensure the software upgrade is performed on the far-left controller.  
VAT #2 will be grayed out, as software updates can **NOT** be performed on any controller other than VAT #1 controller.



SOFTWARE VERSION	
	LAST OCCURANCE
9. BOARD ID	1

3. Go to SOFTWARE VERSION on all the controllers and ensure that BOARD ID's are correct. VAT 1=1, VAT2=2, etc. If BOARD ID on VAT 1 is not 1 then a pin is in the wrong location in the 6-pin locator connector. It should be in the following position (see photo) for VAT 1.
4. Ensure the VAT ID locator wire is not loose for fryers with hardware VAT ID locators.
5. For fryers with the Common Controller with the metal surround bezel, ensure the VAT ID in **Service>Service>3000>Tech Modes>Select Vat ID** is set for Vat ID 1 for the far-left controller.



### Software or menus do not update

1. Power cycle fryer ensuring that the reset switch is pressed and held for 60 seconds or greater, or power is removed for 60 seconds or greater.
2. Recheck software versions or menus. If they still do not update repeat step #1 and recheck.

### Display reboots automatically during an update

1. Power cycle fryer ensuring that the reset switch is pressed and held for 60 seconds or greater, or power is removed for 60 seconds or greater.
2. Update the software or menus again.
3. Check software versions or menus. If they still do not update repeat step #1 and recheck.

### Controller keeps rebooting after an update

1. Ensure ALL controllers display OFF.
2. Update the menu files again.
3. Power cycle fryer ensuring that the reset switch is pressed and held for 60 seconds or greater, or power is removed for 60 seconds or greater.
4. Check menus. If they still do not update repeat step #1 and recheck.

### Change Filter message after an FIB2 Reset

1. This is normal after an FIB2 reset.
2. Pull the filter pan slightly out slightly of the cabinet until a "P" is visible on the top right corner of the display for 30 seconds or greater until the message disappears.
3. Push the filter pan back into the fryer.

**Controller displays SPIFI FILE ERROR and SD CARD FILE ERROR**

1. Flash drive not removed when prompted during software update. Remove the USB, power cycle the fryer, ensuring the power is removed for 60 seconds or greater.

**Controller displays NO SPIFI CRC AVAILABLE, SD CARD FILE ERROR, USB FILE ERROR**

1. Power cycle the fryer, ensuring the power is removed for 60 seconds or greater.
2. If the controller doesn't recover, the memory is corrupted. Replace the controller.

**Controller display doesn't return after an update. The screen remains black for longer than 5 minutes.**

1. Power cycle the fryer, ensuring the power is removed for 60 seconds or greater.
2. If the controller doesn't recover, the memory is corrupted. Replace the controller.

**Prior to calling the Technical Assistance Hotline, try the troubleshooting steps above. If the troubleshooting steps do not correct the issue, call: 1-800-551-8633.**

