

WELLS BLOOMFIELD LLC  
 10 Sunnen Drive, St. Louis, MO 63143  
 telephone: 314-678-6314  
 fax: 314-781-2714  
 www.wellsbloomfield.com

# SERVICE INSTRUCTION

## WFAE55FC & WVAE55FC WFAE55FS & WVAE55FS CONTROL REPLACEMENT

The kit has been designed to address replacing a failed controller in a Wells Electric Open Frypot Fryer. The new controller requires a new control panel, thermistor, relay and wiring.

Please read these instructions thoroughly before beginning these process. This should be performed by a licensed Wells service agent.

WS-WL0334 Control Retrofit Replacement		
Part Number	Description	Quantity
2C-1810	WASHER 3/16 BURR STL NP	4
2C-2553	NUT 6-32 HEX STL NP	4
2E-307334	RELAY 240VAC	1
2E-49550	SWITCH ROCKER POWER WFAE	1
2J-Z16332	THERMISTOR 91K W/ LEADS	1
2J-Z16356	CONTROL CTT	1
2K-Z1530	SPACER	4
2K-Z16357	COMPRESSION FITTING	1
2M-Z16212	FACEPLATE CONTROLLER 55FC	1
2M-Z16330	INSTRUCTION SHEET	1
2M-Z16331	LABEL DIAGRAM 55FS SERIES	1
E7-Z16328	CONTROL PANEL	1
E7-Z16329	WIRE KIT CTT RETROFIT	1

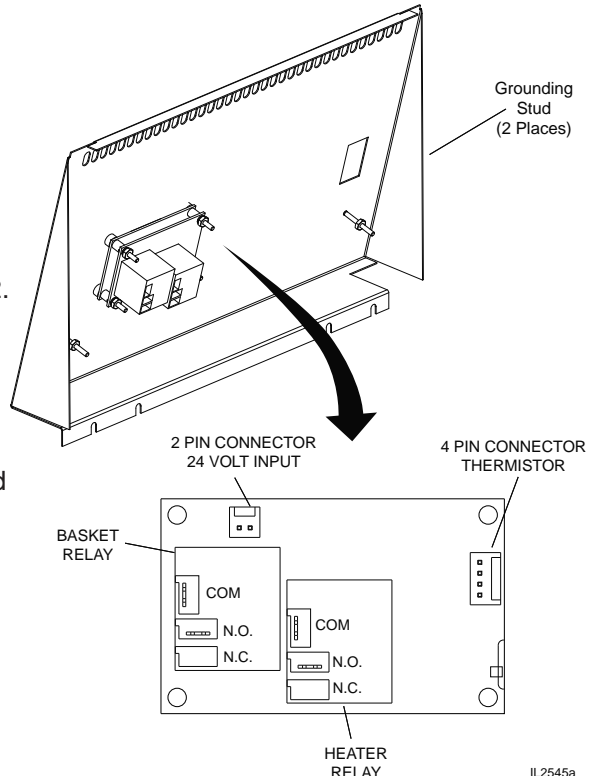
### Installation Instruction

1. Unit must be disconnected from power supply before service
2. Drain oil from fry kettle.
3. Remove front panel with control board.
4. Remove ground wires from front panel.
5. Remove power switch from old control panel and disconnect the associated wires from the switch. (8A, 9A, 16, 24, 25, 26, 27, 28) *Note: wires 24 & 28 non-ventless units only.*
  - a. For ventless fryers the wires that need to be disconnected from the switch are 8A, 9A, 16, 40, 25, 26, 27 & 42.

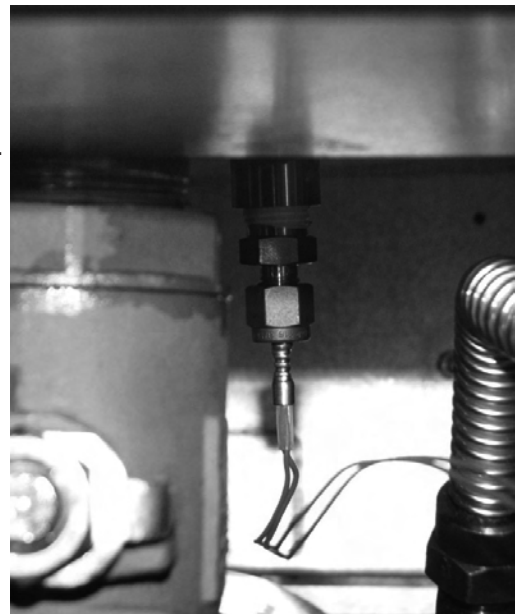


**Note: Audible alarm needs to be disconnected but should remain in place.**

6. Remove and discard wires attached to multi pin connectors from old control. (10, 11, 12, 13, 22, 21, 19, 20)
7. Attach ground wires to new control panel.
8. Reinstall main power switch and associated wiring (8A, 9A, 16, 24, 25, 26, 27, 28) into replacement control panel.
- a. If ventless model; the following wires need to be re-attached 8A, 9A, 16, 40, 25, 26, 27 & 42.
9. Remove Basket lift solid state relays from control housing rear panel & replace with new relay 2E-307334.
10. Remove and discard old wires (23, 30, 31, 32 & 33) from the control housing rear panel.
11. Remove ring terminals from wires 17 & 18 and replace with 1/4" inch push on terminals.
12. Attach wire 17 to the N.O. terminal of the basket relay on the new control board. (see wiring diagram).
13. Attach wire 18 to the N.C. terminal of the lift relay on the new control board. (see wiring diagram).



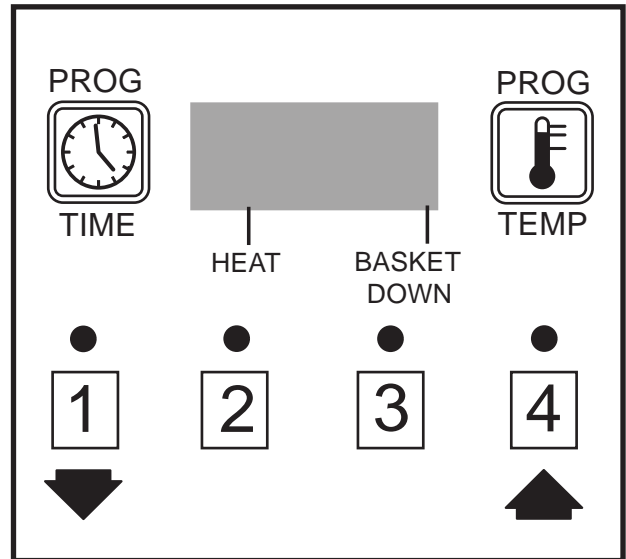
14. Using teflon tape on the threaded connections, replace temperature probe assembly with new probe & compression assemblies located in the bottom of the kettle. *(As shown here)*
15. Connect temperature probe to the control board terminal marked "J4".
16. Remove surge suppressors (if present) from hybrid contactor, high limit contactor, and control circuit transformer.
17. Attach new wire assembly 12/13 to secondary on transformer and power input connector "J3" on new board.
18. Attach new wire assembly 11A to hybrid relay terminal and COM terminal on the new relay 2E-307334. *(see wiring diagram).*
19. Attach wire 19 to the safety contactor and to the N.O. terminal on the new relay 2E-307334.
20. Attach new wire assembly 11 to COM terminal heater relay mounted to center of the new board *(see wiring diagram).*
21. Attach the other end of new wire 11 to the 3/16 input terminal on the relay mounted on the wall of the fryer.
22. Attach new wire 14A to the remaining input terminal on the new relay 2E-307334 *(see wiring diagram)* and to the safety contactor.
23. Attach the tandem end of the new wire assembly 30/23 to the COM terminal on the lift relay on the control board *(see wiring diagram).*
24. Attach wire 23 to the high limit thermostat with wire 24 *(Non-Ventless Units Only).*
25. For ventless models 23 & 43 attach together at the high limit thermostat.
26. Attach wire 30 to the terminal of the transformer that corresponds to the nameplate voltage on the fryer (208 or 240).
27. Attach the new control panel to the fryer body.
28. Connect power to the fryer and fill the kettle with oil.
29. Check for leaks at the probe fitting.



## New Board Operating Instructions

### Program Time:

1. Press and hold the "TIME" program key 3 seconds. Display will read "Prog"
2. Select a key 1 – 4 to program.
3. Adjust time up or down using keys 1 & 4.
4. Press program key to accept (control is now ready for pre-alarm time set (optional))
5. Adjust pre-alarm "UP" or "DOWN" using keys 1 and 4, or
6. Press "PROG" key to accept (Default Value "0")
7. Select Another key to program and repeat steps 2 – 6.
8. Press "TIME PROG" key to exit program mode.

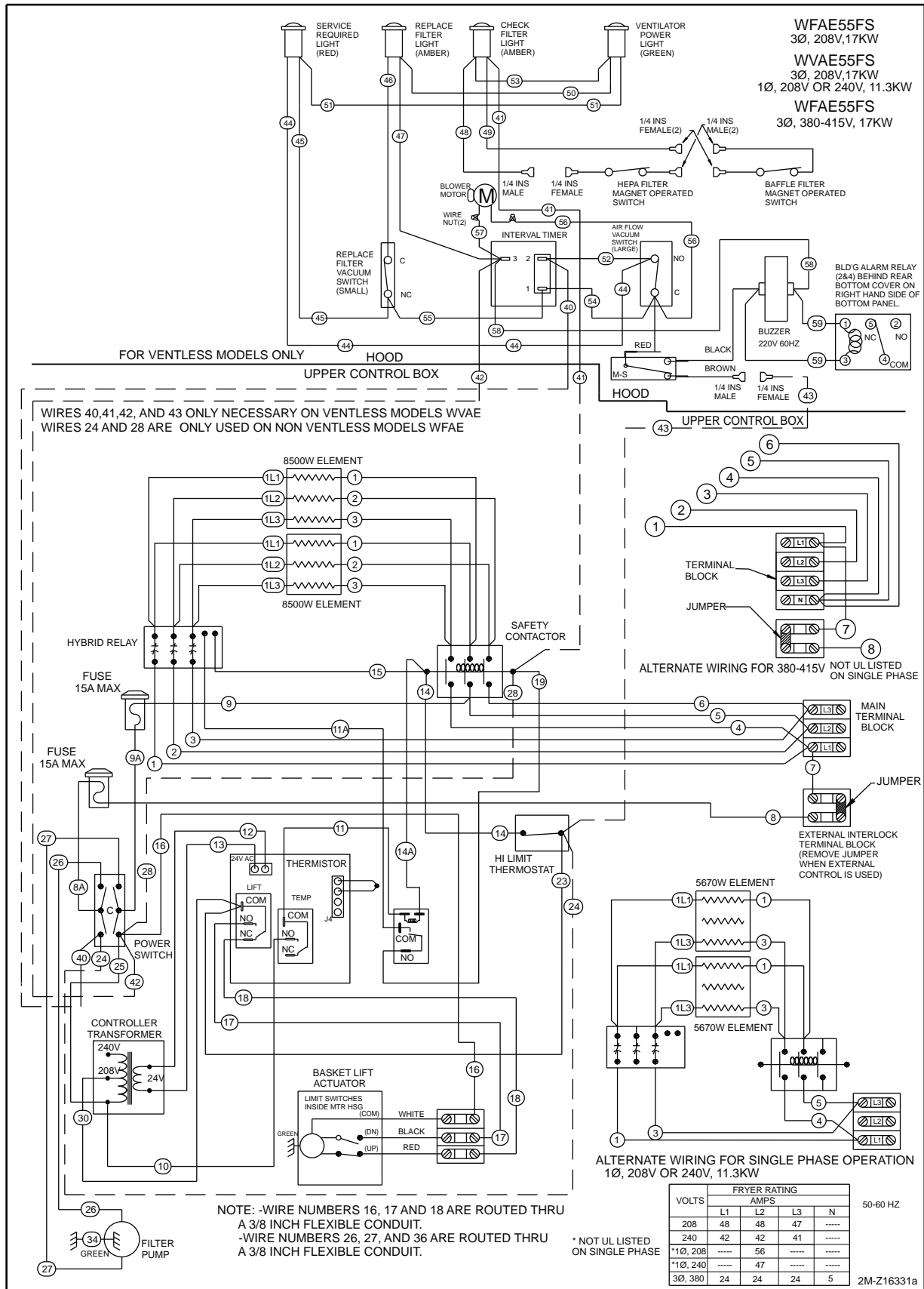


### Program Temperature:

1. Press and hold the "TEMP PROG" key 3 seconds. Display will read "Prog".
2. Select either key 1 or 4 to program.
3. Choose "C" (Celsius) or "F" (Fahrenheit) using keys 1 or 4.
4. Press "TEMP PROG" key to accept.
5. Set temperature using keys 1 and 4, DO NOT EXCEED 375°F (190°C).
6. Press "TEMP PROG" to accept.
7. Press "TEMP PROG" key again to exit program mode.

### Display Descriptions

- Lo Fryer is below cooking temperature
- rEdY Fryer has reached cooking temperature
- done cook cycle has been completed
- Hi Fryer has exceeded cooking temperature



LABEL, DIAGRAM 55FS CTT RETROFIT

55FS SERIES