ULTRAFRYER® SYSTEMS

Ultrafryer Basic
Low Oil Level Model E3EX-14
With 8” Vat
Operation Instructions for Remote
U-23 with Auxiliary Controls

PN 30A254

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PREFACE

This Manual was written and published by the Engineering Department, Ultrafryer Systems for use by personnel who will operate a Model E3EX–14 Electric Fryer With 8" Vat in a commercial cooking environment.

This appliance is intended for professional use and is to be operated by qualified personnel.

Throughout this manual, **NOTES, CAUTIONS**, and **WARNINGS** are used to alert the operator to items of special circumstances. An **example** of these items are identified as follows:

NOTE: When the selector switch is in position #1 the fryer will not heat.

CAUTION: To assure producing a quality product while prolonging the life expectancy of the fryer, ensure that the boil-out, and cleaning instructions are strictly followed.

WARNING: Do not allow any cleaning solution or water to splash into a vessel of hot cooking oil, as it will contaminate the oil and may cause the oil to splatter, causing severe burns.

For Service or questions concerning the Ultrafryer Contact us at:

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This manual is intended as a guide for all Basic Model Fryers, regardless of configuration and controllers. It is to be used in conjunction with the applicable controller manual that is included with the fryer.

MODEL FRYER E3EX BASIC FM 2V– 1-14 1-8" WITH DUAL REMOTE U-23 CONTROLLERS, LOW OIL LEVEL, & AUX. CONTROLS

BASIC COMPONENTS LIST

1) Oil Level Indicator Lights

2) U23 CONTROLLERS * (Used with existing field boxes)

3) Vat Drain Valve

4a) Control Selector Box LH side vat.

4b) Control Selector Box RH side vat.

5) DRAIN PIPE

NOTE: U-23 CONTROLLERS WILL BE SHIPPED LOOSE WITH FRYERS TO BE CONNECTED TO THE EXISTING CONTROL BOXES LOCATED IN THE RESTAURANT

MODEL FRYER E3EX BASIC FM 2V 1-14 1-8” WITH DUAL REMOTE U-23 CONTROLLERS, LOW OIL LEVEL, & AUX. CONTROLS

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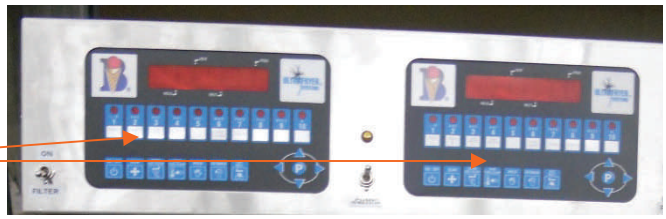

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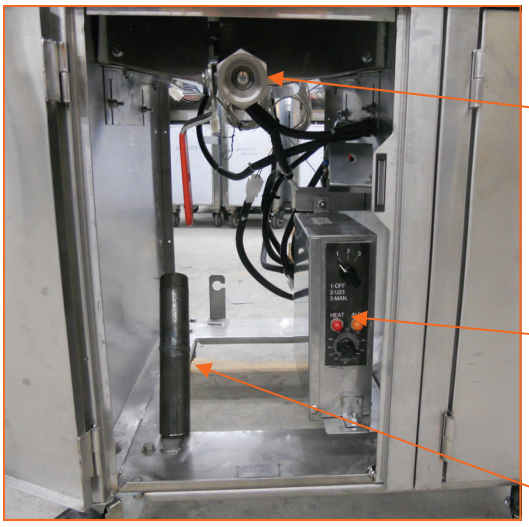

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4a

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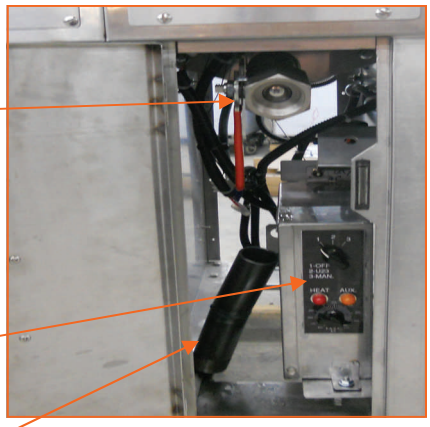

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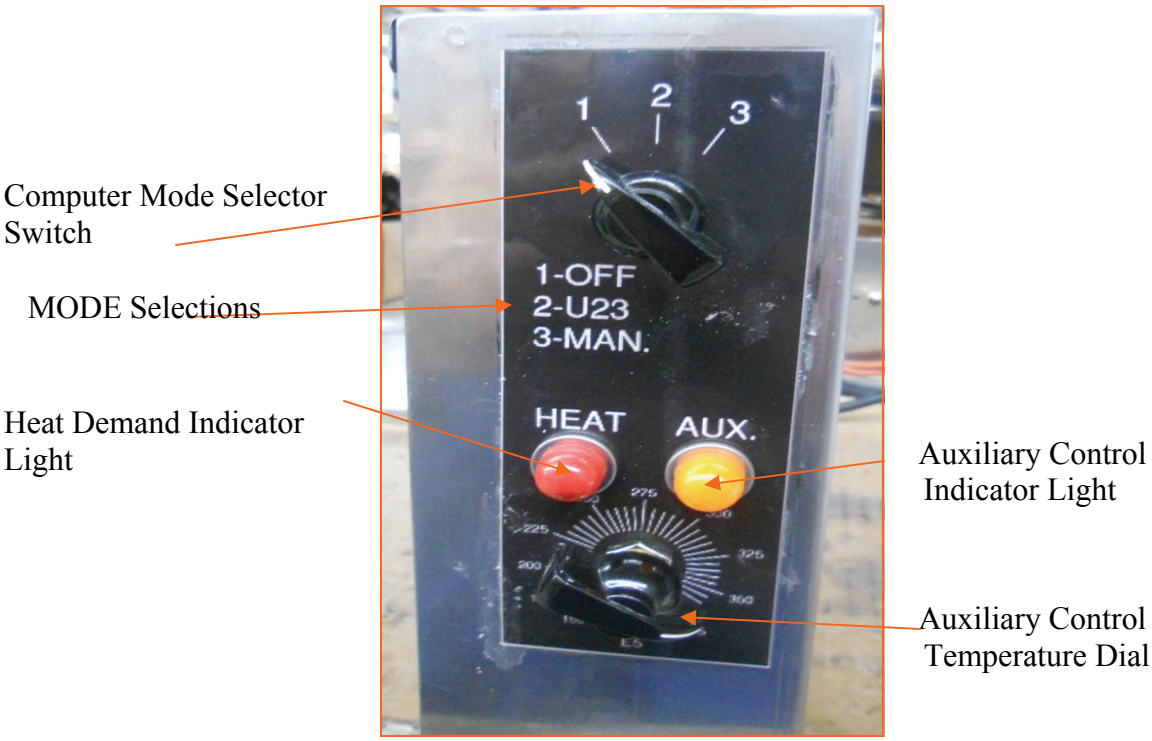
14” Vat

8” Vat

OVERVIEW
CONTROL SELECTOR BOX

BASIC UNIT PN #12C942



SELECTION MODES

1. Position #1 is the Power Off mode. There is no power to the box, and all controllers are off (not powered up)
2. Position #2 turns on power to the U-23 computers. The yellow indicator light remains off , the red heat demand light will turn on when the U23 calls for heat.
3. Position #3 is the manual mode. The E5 control (inside the selector box) is activated and all temperature selections are made with the Auxiliary Temperature Dial located on the front of the box. The yellow indicator light will turn on and remain on while this mode has been selected. The red heat demand light will turn on when the E5 control calls for heat.

OVERVIEW
CONTROL SELECTOR BOX

1. Position #1 Off condition When fryers are not in use no electrical power is supplied to the control box .

2. Full computer control is obtained by setting the control mode selector switch to position #2. The most effective control of the fryer heating is the computerized controllers on the remote computer control box. All filtering operations require manual operation.

3. By setting control selector box to position #3, the auxiliary E5 control will be activated. The yellow incandescent light will come on indicating the U-23 ‘s have been deactivated and fryer operation is now being accomplished with E5 auxiliary control.

AUXILLIARY COOKING CONTROL
BACK UP E5 CONTROL POSITION #3
WITHOUT FILTRATION OPTION

PURPOSE: The purpose of the auxiliary cooking controller MANUAL-POSITION #3 is to provide uninterrupted service to the fryer in case the primary controller fails.

HOW DOES IT WORK: To activate the auxiliary controller, turn the black knob to position #3. The yellow incandescent light will come on. Power from the primary controller will be removed and sent to the auxiliary control board (located inside the control box shown here). The fryer will be immediately turned on. Depending on current status of the fryer, the auxiliary control will either activate the power train (heating elements on the electric fryer or the heat exchanger on the gas fryer) calling for heat or, if the fryer is up to the set point temperature, the fryer will stay in the ready mode and not call for heat. NOTE: The heat demand (RED LIGHT) will be on to signify the call for heat. This is located on the front face of the control box next to the yellow "AUX" light. When you first switch to the auxiliary control, a slight delay will occur while the auxiliary control board powers up.
To restore power to the primary controller, simply turn the dial to position #2 Power will be removed from auxiliary controller and returned to the primary controller. To turn the fryer on, push the on/off button lo-

SEQUENCE OF OPERATIONS:

1. Select the set point on the potentiometer to the desired cooking temperature. NOTE: The potentiometer will be located below the lights on the control selector box, and will be calibrated by the manufacturer.
2. Press the ON/OFF button on the primary controller to the off position.
3. Turn on the black knob on aux, control box to position #3.
4. This will bring power to the auxiliary control. The yellow light will come on indicating the the auxiliary control has power.
5. The fryer will turn on and bring the oil temperature up to the set point. If oil temperature is at the set point temperature, the fryer will be in the ready mode.
6. Fryer is ready to cook. The operator will be required to provide their own timing device i.e. timer, stop watch, clock, etc.
7. Turn the black dial knob to position #2. The LED on the primary controller will light up.
8. Push the ON/OFF button on the primary controller to ON.
9. The fryer will turn on and power the fryer up or stay in the ready mode.
10. The fryer is ready to cook.

MANUAL FILTRATION

PURPOSE: To provide for manually filtering the fryer .

NOTE: Position #1 is the preferred position when the fryers are not being utilized.

HOW IT WORKS: Position #1 diverts power to the Power Off circuit and allows for filtration service.

NOTE: When the selector switch is in this position, the fryers will NOT heat.

SEQUENCE OF OPERATION:

1. Turn selector switch to position #1. Removes power from the fryer.
2. Attach the drain valve pipe (included with the fryer).
3. Turn the drain valve of the selected vat. This will drain the vat into the filter tub.
4. When finished filtering, close the drain handle Turn the drain handle to the up position.
5. Return the clean shortening to the vat.
6. Turn the selector switch to position #2 or #3 this will allow the controllers to power up and work the fryer

LOW OIL LEVEL LIGHT

PURPOSE: The purpose of the "Low Oil Level Light" is to alert the operator the oil level in the fryer vat is below the fill level and may be required to top off the oil level in the vat. NOTE: The light is a "warning only" and does not stop the operation of the fryer.

HOW DOES IT WORK: A temperature probe (sensor) located on the front wall of the vat activates the oil light. When the probe is in contact with the hot oil (above the factory set point) the light will remain off. Once the probe is exposed to oil/ air temperatures below factory set point, the light will turn on and remain on until the probe senses a temperature above the factory set point. NOTE: During fryer start up, the oil light will be on until the oil temperature exceeds the factory set point.

OIL LEVEL: The vat is designed to hold 35 lbs. of oil (one container of liquid oil). At this oil level, the shortening will be just enough to reach the bottom of the stamped "shortening level" mark. The recommended fill level is for the oil level to reach the middle of the "E" in the word "Level". This will ensure the oil covers the oil level probe, and the proper temperatures are reached to keep the low oil level light off when the vat is full.

OPERATION: During normal cooking, the oil level light will remain in the off position. At which point the oil level should be checked. In order to see if the oil level in the vat needs to be topped off, cooking must be stopped and the vat is allowed to idle (the fryer must remain on). ONLY DURING IDLE CAN YOU GET AN ACCURATE READING OF THE OIL LEVEL. Once the vat is in idle mode, the oil will level off. If the oil level is below the probe, the light will turn on and remain in the on position. If the oil is touching the probe, the light will remain in the off position assuming oil temperature is above factory set point. NOTE: When topping off with cold oil, you may need to wait until the added oil heats up and reaches the cooking set point temperature.

GENERAL INFORMATION: Normally, when the vat is filled to the 35lb level, once the vat loses approximately 1.5 lbs. of shortening, due to drag out, the oil light will come on. At this level, the oil is still well above the heating elements, and the oil level in the baskets is approximately at ½ the basket. After an oil loss of 5 to 6 lbs., the oil level is still above the heating elements, but the oil level in the baskets is now below ½ the basket. Food product loaded above this level will now be exposed and could result in uncooked product.

RECOMMENDATIONS: When to fill the vat is up to the operator. However, the recommended time to fill the vat would be to check the oil level after a long period of cooking, i.e. lunch or dinner rush, or any unexpected rush in between and top off the shortening to the proper level. The oil level in the vat should NOT go below 30 lbs. (approximately 1" to 2" above the heating element).

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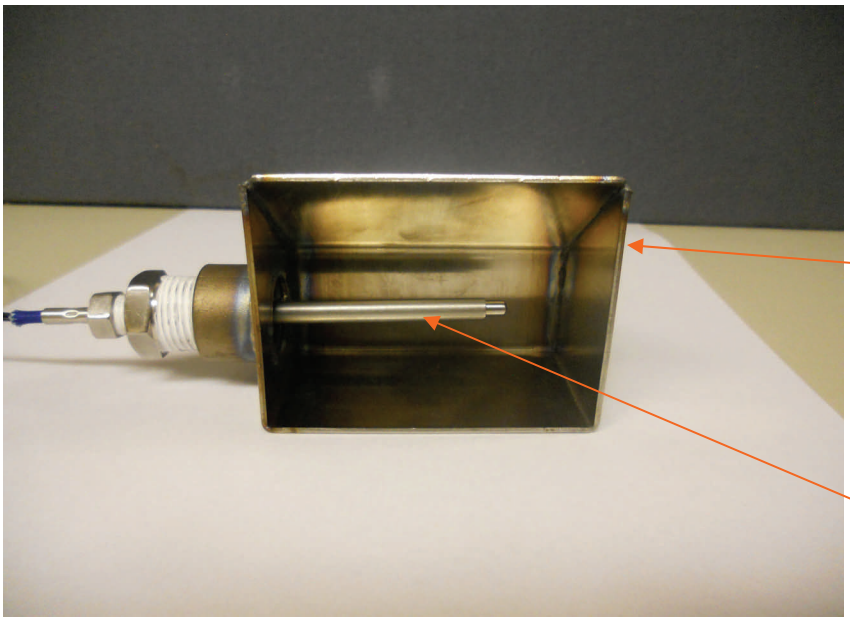

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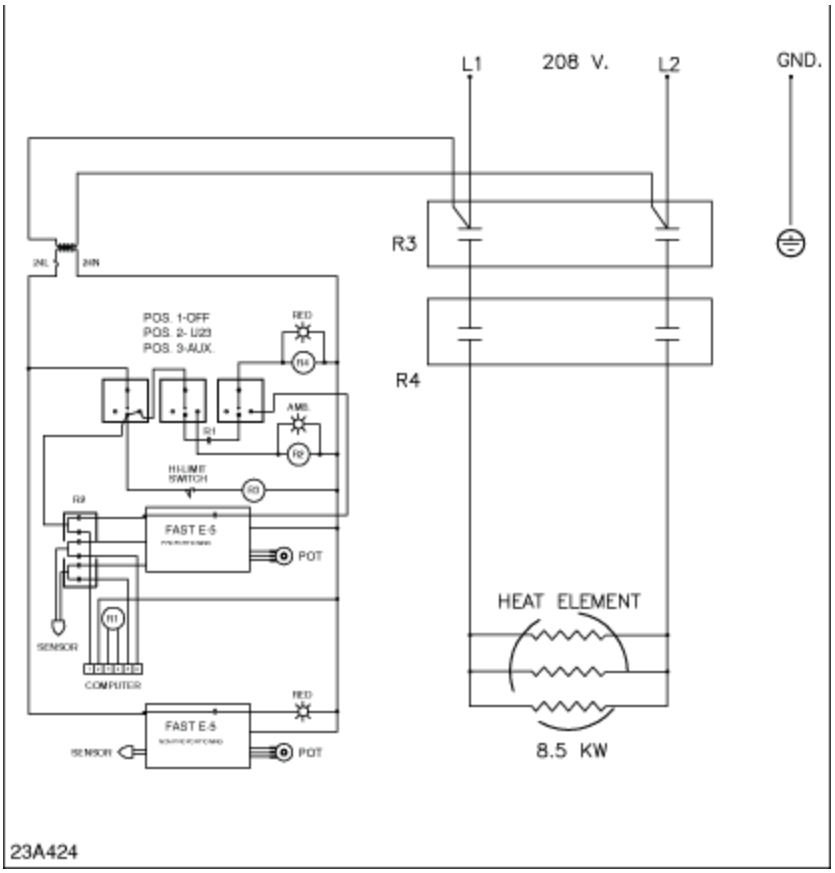
1. **Low Oil Level Decal**
2. **Low Oil Indicator Light**
3. **Low Oil Probe Box**
4. **Low Oil Level Probe (Thermistor)**


L1
208 V.
L2
GND.
R3
R4
2NC
2NO
POS. 1-OFF
POS. 2- U23
POS. 3-AUX.
RED
AMB.
HI-LIMIT SWITCH
FAST E-5
POT
SENSOR
COMPUTER
HEAT ELEMENT
8.5 KW
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