Ultrafryer®

Model B-E20-18/20 & B-E17-14

Electric Fryer Operation Instructions

WARNING: California Residents Only. This product can expose you to chemicals including chromium which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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PREFACE

This manual was written and published by the Technical Publications Department, Ultrafryer Systems, for use by personnel who operate an Ultrafryer Model EUF Electric Fryer equipped with an Ultrastat 21 or Ultrastat 25 Cooking Computer.

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NOTE: This manual is applicable to "Standard" Electric Model EUF Bank of Fryers. It can be used as a guide in operating special variations of an Electric Model EUF Bank of Fryers. It also replaces Model EU Electric Fryer Maintenance & Repair Manual PN 30A013.

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GENERAL INFORMATION

General Information

ULTRAFRYER® LIMITED WARRANTY: PAR-3 GAS, ELECTRIC

Ultrafryer Systems warrants to the original purchaser of a gas or electric Ultrafryer® sold within the United States, its territories and Canada, that it will be free of defects in material and workmanship for the periods listed below:

STAINLESS STEEL FRYER VAT – Stainless Steel fryer vats are warranted for (10) ten years upon the terms hereinafter described. The (10) ten year warranty coverage applies ONLY to the Stainless Steel fryer vat and does not apply to the other components such as controls, fire boxes, gaskets, mounting hardware, or the heat shield weldment. The (10) ten year limited warranty coverage for the Stainless Steel fryer vats are as follows: (1) Vats that fail due to faulty workmanship or materials within the first twelve (12) months from the date of initial start up will be exchanged at no cost. Standard delivery ground freight will be prepaid by Ultrafryer Systems **for first year failures only**. The cost of labor to install the replacement vat will be covered by Ultrafryer Systems for vats, which fail within twelve (12) months from the date of initial start up. Labor for vat replacements after the first year is the responsibility of the owner (2) Vats that fail within the second through fifth year will be exchanged at $250.00 FOB San Antonio. (3) Vats that fail within the sixth through eight year will be exchanged at 50% of current selling price of said vat FOB San Antonio. (4) Vats that fail within the ninth through tenth year will be exchanged at 70% of the current selling price of said vat FOB San Antonio. (**Example**: If the current selling price for a particular vat is $2,000.00, then a failure during the sixth through eighth year would be exchanged for $1,000.00; if the failure occurred in the ninth or tenth year it would be exchanged for $1,400.00.) Proper credit issue for vat failures is contingent upon receipt, by Ultrafryer Systems, of the serial number identification tag for any failed vat.

ULTRAFRYER PARTS – All parts on the Ultrafryer® are covered for a period of one (1) year from the initial date of start up. This is to include gas valves, switches, thermostats, etc. Ultrafryer Systems reserves the right to charge for certain parts such as computers, filter pumps and motors or any item over the amount of $100.00 until Ultrafryer Systems receives the defective part back. **After inspection, credit for the part will be issued to the purchaser provided the part is deemed defective and that defect is not the result of neglect or abuse by the user**. The shortening filtration system, (hoses) are warranted for ninety (90) days from the initial date of start up.

PROCESSING WARRANTY CLAIMS – The equipment owner must promptly notify Ultrafryer Systems Warranty Department of any alleged defects as soon as they are discovered by calling 1-800-525-8130. After such notice, the Warranty Department will perform its obligation under this warranty within a commercially reasonable period of time. If alleged defects develop after normal business hours, on weekends or on holidays the owner must call Ultrafryer Systems first at the above number. This number is monitored 24 hours a day, 7 days a week. Ultrafryer Systems will notify an authorized service agent to make repairs during normal hours or after hours. Any parts that need to be shipped back to Ultrafryer Systems will be shipped back **prepaid by the customer** marked with the processing number and to the attention of the WARRANTY DEPARTMENT.

NON WARRANTY COVERAGE – This warranty does not include coverage for any consequential cost of damages including, but not limited to, any loss in store sales, spoiled food products, transportation, duty or custom cost. This warranty does not cover the Ultrafryer® exported to countries outside the United States and its territories. This warranty does not cover original installation and adjustments such as leveling, calibrations and electrical and gas connections. This warranty does not cover travel over 100 miles or 2 hours driving time from the location of the Ultrafryer® or overtime or holiday charges unless the Warranty Department granted prior approval. This warranty does not cover damage due to misuse, abuse, alteration or accident. This Warranty does not cover improper or unauthorized repair or installation, damage in shipment, normal maintenance items such as gaskets, hoses, and exterior finishes. Ultrafryer Systems will begin the fryer warranty one week after shipment but will adjust the warranty upon receiving approved documentation. We reserve the right to void component part warranty on any Ultrafryer that is stored more than six (6) months after shipment from Ultrafryer Systems and not put into service.

LABOR COVERAGE – The cost for labor to replace parts are covered for one (1) year after the initial start up. **The Warranty Department must be promptly notified of any defects within the first year of operation**. The labor warranty does not include the cost to repair or clear dirty filter systems or perform any adjustments that would normally fall under the tasks associated with a proper start up and/or demonstration. **Labor is covered by Ultrafryer Systems for repairs by an AUTHORIZED service agent**. Owner is responsible for all costs associated with fryer installation and start up unless prior arrangements have been made with Ultrafryer Systems.

DISCLAMIER OF WARRANTIES

Other than as stated herein, ULTRAFRYER SYSTEMS makes no warranty of any kind, express or implied, including but not limited to any warranty of merchantability of fitness for a particular purpose, including trade usage. Ultrafryer Systems' sole obligation, and purchaser's sole remedy, under this warranty is repair or replacement, at the discretion of Ultrafryer Systems, of any part or component that proves to be defective in materials or workmanship. In no event shall Ultrafryer Systems be liable for consequential, incidental, or special loss or damages arising from the use of, or inability to use, the ULTRAFRYER®. This limited warranty is the only and complete statement with respect to warranties of NEW Ultrafryer® PAR-3 Gas and Electric ULTRAFRYERS® sold after June 1st, 2000. There are no other documents or oral statements for which Ultrafryer Systems will be responsible. Effective 2-1-2008.

ULTRAFRYER® LIMITED WARRANTY: CADET

Ultrafryer Systems warrants to the original purchaser of a gas or electric Cadet sold within the United States that it will be free of defects in material and workmanship for the periods listed below:

STAINLESS STEEL FRYER VAT – Stainless Steel fryer vats are warranted for (8) eight years upon the terms hereinafter described. The (8) eight year warranty coverage applies ONLY to the Stainless Steel fryer vat and does not apply to the other components such as controls, fire boxes, gaskets, mounting hardware, heat exchanger baffles or the heat shield weldment. The (8) eight year limited warranty coverage for the Stainless Steel fryer vats are as follows: (1) Vats that fail due to faulty workmanship or materials within the first twelve (12) months from the date of initial start up will be exchanged at no cost. Standard delivery ground freight will be prepaid by Ultrafryer Systems **for first year failures only**. The cost of labor to install the replacement vat will be covered by Ultrafryer Systems for vats, which fail within twelve (12) months from the date of initial start up. Labor for vat replacements after the first year is the responsibility of the owner. (2) Vats that fail within the second through fourth year will be exchanged at $350.00 FOB San Antonio. (3) Vats that fail within the fifth through sixth year will be exchanged at 60% of current selling price of said vat FOB San Antonio. (4) Vats that fail within the seventh through eighth year will be exchanged at 75% of the current selling price of said vat FOB San Antonio. (**Example**: If the current selling price for a particular vat is $2,000.00,then a failure during the fifth through sixth year would be exchanged for $1,200.00, etc.) Proper credit issue for vat failures is contingent upon receipt, by Ultrafryer Systems, of the vat and fryer serial number identification tag for any failed vat.

ULTRAFRYER PARTS – All parts on the Ultrafryer® are covered for a period of one (1) year from the initial date of start up. This is to include computers, gas valves, switches, thermostats, etc. Ultrafryer Systems reserves the right to charge for certain parts such as computers, filter pumps and motors or any item over the amount of $100.00 until Ultrafryer Systems receives the defective part back. **After inspection, credit for the part will be issued to the purchaser provided the part is deemed defective and that defect is not the result of neglect or abuse by the user**. The shortening filtration system, (hoses) are warranted for ninety (90) days from the initial date of start up.

PROCESSING WARRANTY CLAIMS – The equipment owner must promptly notify Ultrafryer Systems Warranty Department of any alleged defects as soon as they are discovered by calling **1-800-525-8130.** After such notice, the Warranty Department will perform its obligation under this warranty within a commercially reasonable period of time. If alleged defects develop after normal business hours, on weekends or on holidays the owner must call Ultrafryer Systems first at the above number. This number is monitored 24 hours a day, 7 days a week. Ultrafryer Systems will notify an authorized service agent to make repairs during normal hours or after hours. Any parts that need to be shipped back to Ultrafryer Systems will be shipped back **prepaid by the customer** marked with the processing number and to the attention of the WARRANTY DEPARTMENT.

NON WARRANTY COVERAGE – This warranty does not include coverage for any consequential cost of damages including, but not limited to, any loss in store sales, spoiled food products, transportation, duty or custom cost. This warranty does not cover the Ultrafryer® exported to countries outside the United States and its territories. This warranty does not cover original installation and adjustments such as leveling, calibrations and electrical and gas connections. This warranty does not cover travel over 100 miles or 2 hours driving time from the location of the Ultrafryer® or overtime or holiday charges unless the Warranty Department granted prior approval. This warranty does not cover damage due to misuse, abuse, alteration or accident. This Warranty does not cover improper or unauthorized repair or installation, damage in shipment, normal maintenance items such as heat exchanger baffles, gaskets, hoses, and exterior finishes. Ultrafryer Systems will begin the fryer warranty one week after shipment but will adjust the warranty upon receiving approved documentation. We reserve the right to void component part warranty on any Ultrafryer that is stored more than six (6) months after shipment from Ultrafryer Systems and not put into service.

LABOR COVERAGE – The cost for labor to replace parts are covered for one (1) year after the initial start up. **The Warranty Depart.ment must be promptly notified of any defects within the first year of operation**. The labor warranty does not include the cost to repair or clear dirty filter systems or perform any adjustments that would normally fall under the tasks associated with a proper start up and/or demonstration. **Labor is covered by Ultrafryer Systems for repairs by an AUTHORIZED service agent**. Owner is responsible for all costs associated with fryer installation and start up unless prior arrangements have been made with Ultrafryer Systems.

DISCLAMIER OF WARRANTIES

Other than as stated herein, ULTRAFRYER SYSTEMS makes no warranty of any kind, express or implied, including but not limited to any warranty of merchantability of fitness for a particular purpose, including trade usage. Ultrafryer Systems' sole obligation, and purchaser's sole remedy, under this warranty is repair or replacement, at the discretion of Ultrafryer Systems, of any part or component that proves to be defective in materials or workmanship. In no event shall Ultrafryer Systems be liable for consequential, incidental, or special loss or damages arising from the use of, or inability to use, the Cadet. This limited warranty is the only and complete statement with respect to warranties of NEW CADET fryers. There are no other documents or oral statements for which Ultrafryer Systems will be responsible. Effective 2-1-2008.

SAFETY

The major safety factor associated with the Ultrafryer Model EUF Electric Fryer is burns from hot shortening. In order to prevent serious burns, good housekeeping habits are required. The floor in front of and the area around the fryer should be kept clean and dry. Whenever anything is placed in to a fryer vat, care should be used not to splash the hot shortening. Product should always be "**PLACED**" into the shortening, not thrown. Safety goggles, neoprene insulated gloves and an apron must be worn while filtering or boiling-out a fryer vat. Extreme caution should be exercised when connecting the "Wash Down Hose' **QUICK-CONNECT COUPLER** to the **QUICK-CONNECT STEM** on the rear wall of the fryer vat during filtering or boil-out operations. If this plug is not securely attached to the stem, **HOT** shortening will be discharged around this connection which could cause **SEVERE BURNS.** The Ultrafryer Model EUF Electric Fryer utilizes 120 volts and 208 or 240 volts, single and three phase electrical power and no adjustments or replacement of electrical controls or parts should ever be attempted without first disconnecting **ALL** electrical power. **FAILURE** to do so could result in serious electrical shock or death. Electrical power to the fryer is supplied from more than one (1) circuit breaker and it should be determined that **ALL** electrical power has been removed prior to begining a repair. The fryer and its controls should not be operated with wet hands or while standing in water. To do so can result in serious electrical shock or death.

Fire in liquid shortening should always be a constant concern of team members operating or working nearby the Electric Fryer. The fryer should be equipped with a Fire Suppression system, that automatically **OPENS** the shunt trip circuit breakers, removing electrical power from the fryer if a fire occurs. In addition, this system **MUST** be inspected by a licensed distributor each six (6) months to assure it is operational.

DESCRIPTION/SPECIFICATIONS

The Ultrafryer Model EUF Electric Fryer is constructed from 16 and 18 gauge, type 304 polished satin finished stainless steel. Most Model EUF Electric Fryers are equipped with an Ultrastat Model 21 or 25 Cooking Computer, however, customer's may request the Fryer be equipped with a Default-To-Manual-Restart (DTMR) or an Ultrastat 11 Cooking Computer. In addition, the Model EUF Electric Fryer has a shortening Filtration system that uses a Permafil Stainless Steel Filter Screen. The customer has the option of ordering a Magnepad Filter System that uses a Paper Filter Pad in lieu, of a S/S filter screen. The dimensions of each size fryer is as follows:

ITEM DESCRIPTION	EUF-14 in. (mm)	EUS-18 in. (mm)	EUS-20 in. (mm)
Overall Width	15½" (394)	19½" (495)	21½" (546)
Overall Depth	28¾" (730)	38¾" (984)	38¾" (984)
Work Height	36" (914)	36" (914)	36" (914)
Oil Capacity High Level Low Level	 -- 45 lbs (22.5 liters)	 110 lbs (55 liters) 70 lbs (35 liters)	 138 lbs (69 liters) --
Shipping Cube	10.49 ft^3 (.30 m^3)	18.01 ft^3 (.51 m^3)	19.77 ft^3 (.56 m^3)
Shipping Weight	235 lbs (106 kgs)	265 lbs (119 kgs)	275 lbs (124 kgs)
Electrical Requirements	208 / 240 Volt 3 Ø 17 KW/Vat	208 / 240 Volt 3 Ø 20KW/Vat	208 / 240 Volt 3 Ø 20 KW/Vat

NOTE: Test Start-Up, Operation, Cooking, Filtering, and Boil-Out Procedures of a Model EUF Electric Fryer in this manual are based on the Ultrastat 21 and 25 Cooking Computer Procedures. Refer to Manual 30A053, Ultrastat 11 Cooking Computer Operation Instruction or 30A066, Default-to-Manual-Restart (DTMR) Control Operation Instruction to perform these functions in a fryer equipped with these controls.

INSTALLATION, INITIAL CLEANING, SHORTENING INSTALLATION AND FRYER TEST START-UP

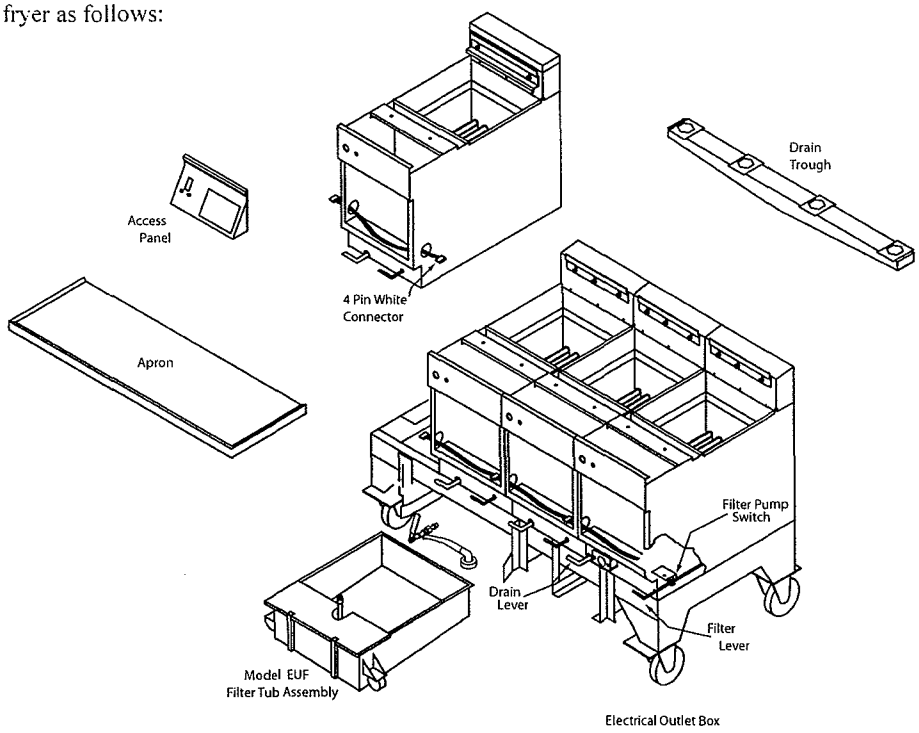
INSTALLATION

GENERAL - Each Model EUF Electrical Fryer should be installed as follows:

1. Properly unpacked and positioned at its operating location within the store.
2. Placed beneath a properly designed exhaust hood and protected by a Fire Suppression System
3. **LEVELED** using a spirit level to assure each vat contains the proper amount of shortening.
4. Installed by a licensed electrician and connected to the 1 phase and 3 phase voltages shown on the data plate.
5. Restrained by use of a restraining device to avoid splashing hot liquid and to ensure tension cannot be placed on electrical connections.

UNPACKING - Check that the container is upright. Use an outward prying motion. **DO NOT USE A HAMMER** to remove the wood braces and carton. Check the fryer bank for visible damage; if damage has occured do not refuse shippment, but contact the carrier and file the appropriate freight claims. Remove the two shipping bolts in the front and rear legs and remove the two 2" x 6" (51mm x 152mm) wood supports.

INSTALLING - If sufficient clearance is available to roll the assembled fryer bank into the building, proceed to the **LEVELLING** paragraph below. In the event entrance doors are too narrow to roll the assembled fryer into the building; disassemble and reassemble the fryer as follows:



DIS-ASSEMBLY

A. Perforrn the following steps facing the **FRONT** of the fryer:
   1. Number each vat cabinet from **LEFT** to **RIGHT** and place these numbers on the front and rear panel of each cabinet.
   2. Lower the Temperature Control access panel from each vat cabinet.
   3. **CAREFULLY** remove the **APRON** from the fryer bank by removing the two (2) ¼ - 20 wing nuts, ¼" split washers, and 1⁄16" flat washers from each ¼ - 20 weld stud beneath each cabinet hat section.

NOTE: It may be necessary to cut the **SILICONE SEAL** between the apron and vat cabinets to separate the apron. **DO NOT DAMAGE THE GASKET.**

   4. Remove the **JOINER STRIP** located between each set of vats; then cut the **SILICONE SEAL** between the vats.
   5. **CAREFULLY** separate the **SHORTENING DRAIN TROUGH** from each 2" ball valve plate by removing the four (4) ¼ - 20 hex head bolts and nuts; then remove the drain trough from the fryer.

NOTE: A neoprene gasket was placed between the ball valve and drain trough opening of each vat and sealed with silicone. Therefore it may be necessary to use a sharp instrument to separate the trough from the valve. **DO NOT DAMAGE THE NEOPRENE GASKET.**

6. **CAREFULLY** disconnect the **4 PIN WHITE** connector from its mating receptacle located on the **LOWER** right hand end of each vat; then remove the **BLACK** wiring harness protector from the 2" opening in each vat.
7. **CAREFULLY** disconnect the **ELECTRICAL OUTLET BOX BLACK** and **WHITE** electrical wires connected to wires by **WIRE NUTS** located on the **LEFT HAND** side of the "extreme" **RIGHT HAND** vat.
8. Remove the 10 - 24 truss head screw and nut on the right hand side of each vat used to secure adjoining vats and remove the 10 - 24 truss head screw and nut that secures the "extreme" left hand vat cabinet to the base frame.

B. Perforrn these steps facing the **REAR** of the fryer:

1. Remove the **REAR** panel from each vat by removing the four (4) pan head self-tapping screws.
2. Remove the two (2) 10 - 24 truss head screws and nuts on the right hand side of each vat used to secure adjoining vats.

NOTE: It may be necessary to loosen and move the two (2) electrical contactors to gain access to these screws and nuts.

3. **CAREFULLY** remove the two (2) philips head self-tapping screws along the **BOTTOM** flange of each cabinet.
4. **CAREFULLY** disconnect the **SHORTENING LINE RED** and **WHITE** heater tape electrical wires terminated in the terminal block of the **EXTREME** right hand fryer.
5. **CAREFULLY** disconnect the **FILTER PUMP MOTOR RED, GREEN** and **WHITE** electrical wires terminated in a **4 PIN WHITE** connector from its mating receptacle located on the left hand side of the "extreme" **LEFT HAND** vat.
6. **CAREFULLY** disconnect the **POWER LINE BLACK** and **WHITE** electrical wires terminated in a **4 PIN WHITE** connector from its mating receptacle located on the left hand side of the "extreme" **LEFT HAND** vat.
7. **SECURE** the **SHORTENING LINE** to the base frame on the **LEFT HAND** end of the fryer bank; then **CAREFULLY** loosen and separate the shortening line union attached to each ¾" ball valve.
8. **CAREFULLY** remove each cabinet from the base frame, carry each cabinet into the building; then place the base frame into position in the kitchen.
10. **PRIOR** to re-assembling the fryer bank, remove **DRIED** silicone used to seal the apron to vats, opening between each set of vats, front and rear of each cabinet, lower edge of the two (2) end vats, and perimeter of the base frame.

RE-ASSEMBLY

A. Place each vat cabinet in numerical order in **FRONT** of the base frame from **LEFT** to **RIGHT.**

B. Install each vat cabinet on the base frame as follows:

1. Place a bead of silicone around the perimeter of the base frame for the **FIRST** vat cabinet.
2. **CAREFULLY** place **VAT CABINET #1** in position on the base frame; then secure the cabinet to the base frame by installing a 10 - 24 truss head screw and nut on the left hand flange to the base frame then install two (2) philips head self- tapping screws in the two holes on the **REAR** bottom flange of the cabinet.
3. Repeat the above procedures to install remaining vat cabinets on the base frame.

C. When all vat cabinets are installed on the base frame, secure the cabinets as follows:

1. Place a bead of silicone along the **FRONT, TOP** and **REAR** space between vat cabinets #1 and #2.
2. Install a 10-24 truss head screw and nut in the ¼" holes on the **FRONT** right hand side of vat cabinet #1 and left hand side of vat cabinet #2.
3. Install two (2) 10-24 truss head screws and nuts in the two (2) 3/16" holes on the **REAR** left hand side of vat cabinet #1 used to secure it to cabinet #2.
4. Repeat the above procedures to secure remaining vat cabinets to adjoining vat cabinets.

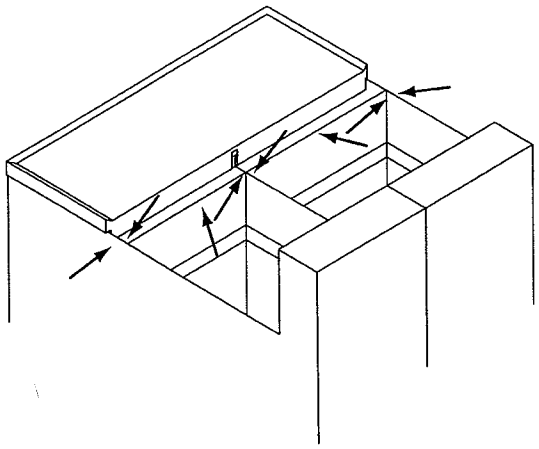
D. Perform these steps facing the **REAR** of the fryer:

1. **CAREFULLY** connect each shortening line union **HAND TIGHT**, remove the device used to secure the **SHORTENING LINE** to the **LEFT** end of the base frame; then **SECURELY** tighten each shortening line union.

2. **SECURELY** connect the **SHORTENING LINE RED** and **WHITE** heater tape electrical wires to the Black and White wire terminals on the Terminal Block of the **EXTREME** right vat.
3. **SECURELY** connect the **FILTER PUMP MOTOR RED, GREEN** and **WHITE** electrical wires terminated in a **4 PIN WHITE** connector to its mating receptacle located on the left-hand side of the "extreme" **LEFT HAND** vat.
4. **SECURELY** connect the **POWER LINE BLACK** and **WHITE** electrical wires terminated in a **4 PIN WHITE** connector to its mating receptacle located on the left hand side of the "extreme" **LEFT HAND** vat.
5. Install a large cabletye on the cable harness on the "extreme" **LEFT** and **RIGHT** vats; then replace the **REAR PANEL** on each vat cabinet using four (4) pan head self-tapping screws in each cabinet panel and fan cover.

E. Perform these steps facing the **FRONT** of the fryer:

1. Install the **BLACK** wiring harness protector in the 2" opening of each vat; then **SECURELY** connect the **4 PIN WHITE** wiring harness connector to its mating receptacle on each vat.
2. **CAREFULLY** connect the **ELECTRICAL OUTLET** box **BLACK** and **WHITE** wires on the "extreme" right hand vat to the **POWER** line **BLACK** and **WHITE** wires using the wire nuts previously removed.
3. Remove any dried silicone from the **SHORTENING DRAIN TROUGH,** place a bead of silicone to the same location on the drain trough, position the drain trough beneath the fryer; then **SECURE** the drain trough to each 2" ball valve plate using four (4) ¼ - 20 hex head bolts and nuts previously removed.
4. Remove any dried silicone from each **JOINER STRIP,** place a bead of silicone in each strip; then place the joiner strip over the edge of all adjoining fryer vats.
5. **CAREFULLY** replace the **APRON** as f ollows:
   a. Remove any dried silicone from the front edge of each vat cabinet and the bottom of the **APRON.**
   b. Place a bead of silicone along the **FRONT** edge of each vat cabinet and fill the **REAR** corners of the apron with silicone so it will be flush with the top of the apron.
   c. Place the apron in position with the **REAR** flange towards the **FRONT** inside edge of each vat and the **FRONT** of the apron, elevated approximately 45 degrees; seat the rear flange of the apron over the front inside edge of each vat; then **CAREFULLY** lower the front of the apron until each ¼ - 20 weld stud is seated in the notches of the front and rear hat section of each cabinet. Slip the apron a little bit to the left and right to center it on the fryer.
   d. When the apron is properly positioned, secure it to the hat sections of each cabinet using the wing nuts, split washers and the flat washers removed earlier.
   e. After the apron has been secured to each fryer cabinet, apply a small bead of multi-purpose sealant to the areas shown in the sketch below.



6. Replace the Temperature Control Access Panel.

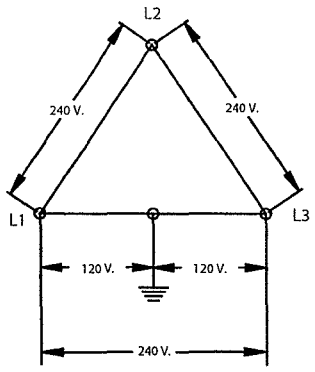
LEVELING - After the Ultrafryer Electric Fryer has been properly positioned in the store, it should be **LEVELED** using a Spirit Level by inserting the appropriate number of shim plates between each leg and caster plate. Leveling will assure that each vat contains the same amount of shortening when checked at the engraved shortening level mark on the rear wall of the fryer vat.

ELECTRICAL CONNECTION - Each Model EUF Electric Fryer is wired internally to operate on 120 volt single phase and 208 or 240 volt 3 phase electrical power as shown on the fryer's rating plate and in the illustration below. The 120 volt control circuit of each individual fryer in a bank of fryers are internally wired in parallel to an eight (8) foot 120 volt electrical cord with a molded electrical plug. The 208 or 240 volt 3 phase circuit of each fryer in a bank of fryers is internally wired to a **SEPARATE** terminal block which is to be used to connect to the building power source. It is **ESSENTIAL** that the 120 volt electrical receptacle is located within 8 feet of the fryer bank location and that provisions are made so that the fryer bank can be moved to service fryers from the rear. Electrical connections to the fryer bank should be made by a liscensed electrician and they must conform to the **NATIONAL ELECTRICAL CODE** as well as to local electrical codes and/or ordinances. To avoid electrical hazards and assure proper operation of the electric fryer, the following precautions should be observed during installation:

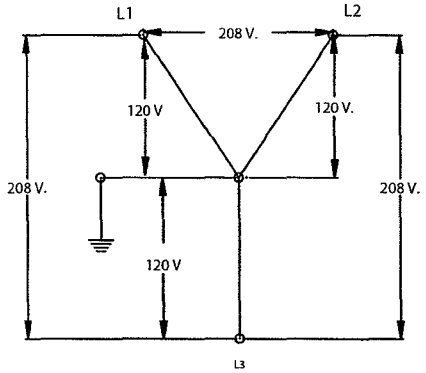
A. **MATCH VOLTAGE:** Before connecting electrical power, insure the line voltage matches the voltage rating on the fryer's Data plate.

B. **CIRCUIT BREAKERS**: The fryer must be connected to a circuit having shunt-trip circuit breakers sized in accordance with requirements of the National Electrical Code as well as local codes and ordinances.

C. **ELECTRICAL CONNECTION:** It is **ESSENTIAL** that one of the **LOW LEGS** (120 volts to neutral) of the building's 208 or 240 volt power source, shown below, be connected to high voltage terminal.**L1**, identified below, for proper operation of the 120 volt heat element indicator lamp.



3 Ø 4 WIRE DELTA NETWORK



3 Ø 4 WIRE WYE NETWORK

D. **GROUNDING:** The fryer **MUST** be grounded to the building ground system according to the National Electrical Code and local codes/ordinances.

E. **FIRE PROTECTION:** The fryer should be installed beneath a powered exhaust hood which complies with NFPA96 standards that is equipped with an approved Fire Suppression System designed to automatically shut-off all sources of electrical power to the fryer in case of a vat fire.

CLEARANCES - The Model EUF Electric Fryer **MUST** be kept free and clear of all combustibles. The **MINIMUM** clearances from combustible and non-combustible construction is 6" (152 mm) from the sides and 6" (152 mm) from the rear of the fryer. The fryer may be installed on combustible floors.

INITIAL CLEANING

New Electric Fryers are wiped clean with solvents at the factory to remove any visible signs of dirt, oil, grease, etc. remaining from the manufacturing process; then given a light coat of oil. Each fryer and filter tub assembly should be **THOROUGHLY** washed with **HOT** sanitizer solution to remove film residue, installation dust or debris and then wiped dry prior to placing the fryer into operation.

FRYER TEST START-UP

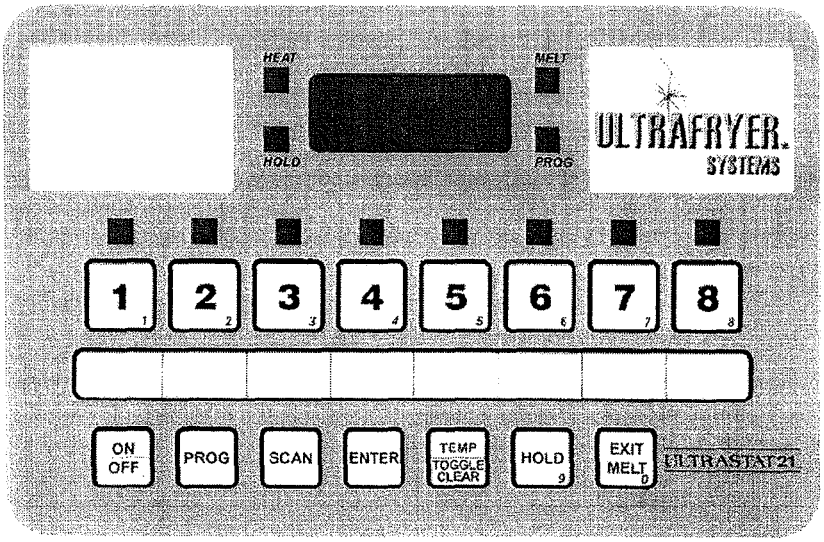
A. TO TEST OPERATE an Ultrafryer Electric Fryer equipped with an Ultrastat 21 Cooking Computer:

1. Ensure the fryer's power ON/OFF Switch is in the OFF position.

2. Fill the fryer vat with hot or cold water to the middle of the **"E<--"** in the word **LEVEL** of the applicable shortening level mark on the rear of the vat.

3. **ENSURE** the **EXHAUST FAN** is **ON.**

4. Perform the following steps, in the order listed:



STEP	ACTION	RESPONSE
1	**ENSURE** the drain lever on the fryer is in the **CLOSED** position, water is at the proper level, then turn the fryer **TOGGLE ON/OFF** switch to the **ON** position.	A. The **AMBER** Power lamp beside the **TOGGLE ON/OFF** switch will **LIGHT.**

CAUTION: PRIOR TO PROCEEDING TO STEP 2 VISUALLY CHECK THAT THE HEAT MECHANISM IS COVERED WITH AT LEAST 2" (51 mm) OF WATER.

2	Turn the Computer **ON** by depressing the computer ON/OFF button; then place the computer in the **BOIL MODE** by pressing the computer keys in the following order: **PROG , 1 , 7 , 3 , 3 , ENTER.**	A. **BOIL** will appear in the computer display. B. The **HEAT** lamp on the computer and the **RED** heat mechanism indicator lamp on the fryer will cycle **ON** and **OFF** indicating the heat mechanism is periodically being turned **ON** and **OFF** to gently heat the water to **190°F (88°C).**
3	When the water begins to **BOIL**, press the following computer keys in the order shown to **EXIT** the **BOIL MODE: PROG , 1 , 7 , 3 , 3 , ENTER.**	A. **LO** will appear in the computer display. B. The **HEAT** lamp on the computer will turn **OFF.** C. The **MELT** lamp on the computer will **LIGHT.**
4	Turn the computer **OFF** by depressing the ON/OFF button; then turn the fryer Toggle ON/OFF switch to the **OFF** position.	A. The computer display will go **BLANK.** B. The **AMBER POWER** lamp will turn **OFF.**
5	After the water in the vat and metal surfaces of the fryer has **COOLED,** drain the water into a floor drain.	

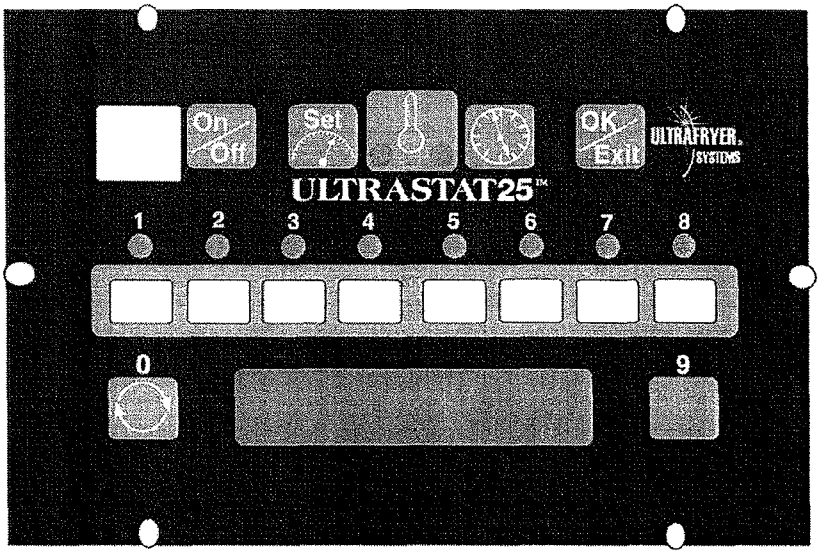
B. TO TEST OPERATE an Ultrafryer Electric Fryer equipped with an Ultrastat 25 Cooking Computer:

1. Ensure the fryer's power ON/OFF Switch is in the OFF position.

2. Fill the fryer vat with hot or cold water to the middle of the **"E<--"** in the word **LEVEL** of the applicable shortening level mark on the rear of the vat.

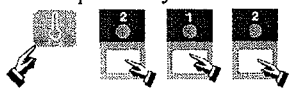
3. **ENSURE** the **EXHAUST FAN** is **ON.**

4. Perform the following steps, in the order listed:



STEP	ACTION	RESPONSE
1	Ensure the drain valve lever is in the closed position and that water is at the proper level; then turn the Toggle ON/OFF switch to the **ON** position.	The **AMBER** power lamp beside the Fryer Toggle ON/OFF switch will **LIGHT.**

CAUTION: PRIOR TO PROCEEDING TO STEP 2, VISUALLY CHECK THAT THE HEAT EXCHANGER TUBES ARE COVERED BY AT LEAST 2" (51mm) OF WATER.

2	Turn the computer **ON** by depressing the computer ON/OFF key; then place the computer in the **BOIL MODE** by pressing the computer keys below in that order: 	A. **BOIL 30:00** will appear in the computer display. B. The **HEAT DEMAND LED** on the computer and the **RED** Heat Mechanism indicator lamp on the fryer will cycle **ON** and **OFF** to heat the water to **192°F (89°C).**
3	When water begins to **BOIL**, press the computer key to exit the Boil Mode. 	A. The Computer Display will go **BLANK.**
4	Turn the Fryer Toggle ON/OFF switch to the **OFF** position.	A. The **AMBER** power lamp will turn **OFF.**
5	After the water in the vat and metal surfaces of the fryer has **COOLED,** drain the water into a floor drain.	

SHORTENING INSTALLATION

A. **LIQUID SHORTENING:** When using liquid shortening (cooking oil) fill the fryer with shortening even with the middle line of the **E <** in the word **LEVEL** of the applicable shortening level mark on the rear wall of the fryer.

B. **SOLID SHORTENING:**

1) Cut a block of solid shortening into small pieces.
2) Place small pieces of solid shortening **EVENLY** on top of the **HEAT MECHANISM** or **THOROUGHLY PACK** these pieces of solid shortening between, below and above the **HEAT MECHANISM.** While packing solid shortening is messy and time consuming, it is the safest and fastest way to melt solid shortening.
3) Ultrastat 21 equipped Fryer
   a) Turn the fryer Toggle ON/OFF switch **ON**; then place the computer in the **SHORTENING MELT MODE** by depressing the ON/OFF button. The **MELT** lamp will **LIGHT** to indicate the computer is in the **SHORTENING MELT MODE**; and the **HEAT** lamp and **RED** heat mechanism indicator lamp on the fryer will cycle **ON** and **OFF** indicating the heat mechanism is periodically being turned **ON** and **OFF** to gently heat the shortening.
   b) When the heat mechanism is **COMPLETELY** covered with **LIQUID** shortening and the shortening is **ABOVE** the Melt Limit Temperature, replace the grill in the fryer vat; then push the **EXIT MELT** button on the computer. Proceed to Paragraph B 5) below.
4) Ultrastat 25 equipped Fryer
   a) Turn the fryer Toggle ON/OFF switch **ON;** then place the computer in the **SHORTENING MELT MODE** by depressing the ON/OFF key. **MELT E, G,** or **P** will appear in the computer display indicating the computer is in the **SHORTENING MELT MODE;** and the **HEAT DEMAND LED'S** on the computer and the fryer's **RED INDICATOR LAMP** will cycle ON and OFF indicating the heat mechanism is periodically being turned **ON** and **OFF** to gently heat the shortening.
   b) When the heat mechanism is **COMPLETELY** covered with **LIQUID** shortening and the shortening is **ABOVE** the Melt Relaease Temperature, replace the grill in the fryer vat; then push the **OK/EXIT** key on the computer.
5) Continue adding solid shortening as follows:
   a) Place small pieces of solid shortening into a fry basket.
   b) **CAREFULLY** lower the basket into the fryer vat.
   c) **GENTLY** turn the basket to allow these pieces of solid shortening to float away.
   d) Repeat the above steps until liquid shortening is even with the middle line of the " **E←**" in the word **LEVEL** of the applicable shortening level mark on the rear wall of the fryer vat.

WARNING!!! TO AVIOD INJURY

I DO NOT MOVE A FRYER FILLED WITH HOT LIQUID.

II ALWAYS WEAR OIL-PROOF, INSULATED GLOVES WHEN WORKING WITH A FRYER FILLED WITH HOT OIL.

III ALWAYS DRAIN HOT OIL INTO A METAL TUB, POT OR CAN ... HOT OIL CAN MELT PLASTIC BUCKETS OR SHATTER GLASS.

PREVENTIVE MAINTENANCE AND TROUBLESHOOTING

PREVENTIVE MAINTENANCE

Minimal maintenance is required on a fryer because of its design and materials used in manufacture. However, some preventive maintenance and inspection must be performed periodically to prevent break downs which could curtail food sales. Any preventive maintenance or inspection should be accomplished with **CAUTION** while the fryer is in operation since **HOT** liquid shortening could cause severe burns. If service or repair is required, all electrical power **MUST BE TURNED OFF PRIOR TO** performing that service or repair.

PREVENTIVE MAINTENANCE SCHEDULE

DAILY

ITEM	INSPECT FOR:
Grease Filters	Clean grease filters in the exhaust hood each evening and allow them to dry overnight.
Filter Tub	Thoroughly clean the filter tub assembly as perscribed on page 34 of the Cleaning Section of this manual. **ENSURE THE WASH DOWN HOSE IS HUNG IN AN UPRIGHT POSITION (BY ONE END) SO SHORTENING CAN DRAIN INTO A CONTAINER!**

WEEKLY

Drain/Filter Pump Valve Levers	Determine that the drain and pump levers are securely attached to the drain and pump valves, and that the valves can be easily opened and closed.
Drain Hoses	Inspect the suction line hose, wash down hose and if applicable the shortening disposal hose for any evidence of deterioration.
Plumbing Heat Tape Insulation	Ensure that insulation and electric heat tape wrapped around the plumbing directly behind the drain trough has not been damaged.
Temperature Sensing Probes	During boil-out of the fryer, inspect the temperature and high limit sensing probes for any visual damage.

TROUBLESHOOTING

A. **GENERAL:** The problems and possible solutions listed in the troubleshooting chart below are typical Problems that are frequently encountered. **ONLY** qualified repairmen are to use the troubleshooting chart to repair this fryer. In the event an electrical malfunction occurs, perform the following checks PRIOR to contacting a repairman:

1. Ensure high voltage circuit breakers are in their proper position.
2. Check that the fryer electrical plug is connected to an electrical receptacle.
3. Ensure the applicable Circuit Breaker is in the **ON** position and that the Toggle ON/OFF Switch is in the **ON** position, and computer is "Powering Up".

B **TROUBLESHOOTING CHART:** Should a problem occur that cannot be corrected after performing the above **CHECKS**, contact an authorized repairman and/or Ultrafryer Systems Customer Service at 1-800-525-8130 and provide the information acquired while performing these checks.

CAUTION: ENSURE REPAIRMEN ARE ADVISED THAT FRYER RESTRAINTS MUST BE DISCONNECTED/ CONNECTED IF A FRYER IS TO BE MOVED DURING MAINTENANCE OR REPAIR AND THAT ELECTRICAL POWER AND/OR GAS MUST BE TURNED OFF PRIOR TO PERFORMING ANY MAINTENANCE OR REPAIR.

TROUBLE SHOOTING CHART

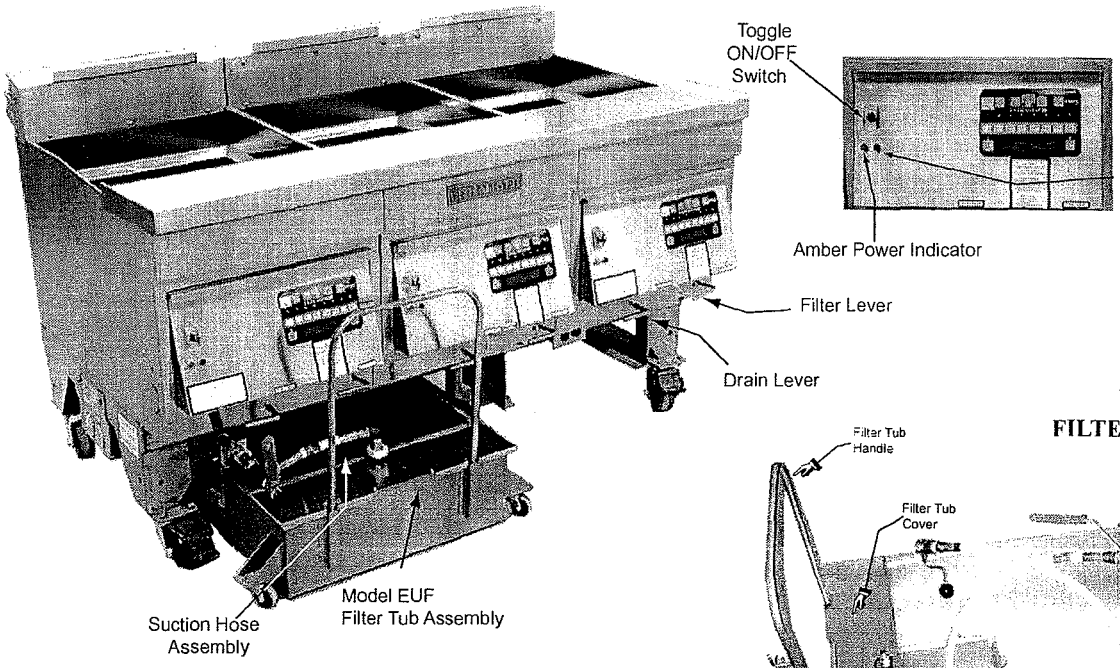
	PROBLEMS	POSSIBLE SOLUTIONS
	General	
A	The Filter Pump Motor fails to operate when the Pump Lever is placed in the **OPEN** position and the Toggle ON/OFF Switch is in the **OFF** position.	1 Insure the filter pump micro-switch is operational, then check the manual reset button on the filter pump motor. **WARNING!!! TURN THE PUMP LEVER HANDLE TO THE CLOSED POSITION PRIOR TO DEPRESSING THE RESET BUTTON. FAILURE TO PLACE THIS HANDLE IN THE CLOSED POSITION COULD RESULT IN SEVERE BURNS FROM HOT COOKING OIL!** 2 If the filter pump motor fails to operate after the reset button has been depressed, repair or replace the motor.
B	Decreased shortening flow rate while filtering.	1 Check for excessive sediment on the filter screen, standpipe suction fitting or in the filter tub.
C	Pump / Motor operates but does not pump shoretening.	1 Check for congealed shortening in the shortening system. 2 Check that the Standpipe is seated in the Knurl Knob. 3 Check for loose Standpipe / Suction Line Coupler connection.
D	Pump / Motor hums but will not pump shortening.	1 Check for congealed shortening in the pump or in shortening plumbing.
	Electric Fryer	
A	Excessive smoke from the shortening.	1 Check the Computer Program to ensure the Pre-Set Cook Temperature is correct. 2 Shortening breakdown has occured. Replace the shortening
B	Process Contactor chatters.	1 Check and / or tighten the Contactor Coil connections. 2 Defective Contactor. Replace the Contactor.
C	Excessive time is required to raise the shortening to cooking temperature. Temperature recovery is slow.	1 Check 3 Ø 208 / 240 Voltage applied to Heat Element. 2 Defective Heat Element **(SEE NOTE)**
D	Decreased shortening flow rate while filtering	1 Check for excessive sediment on the Filter Screen, Standpipe Suction fitting or in the Filter Tub.

NOTE: The most effective means to determine if a Heat Element is operational is to measure the Current Draw of an Element with an Amp Probe. The Current drawn by a good Heat Element should be close to the values shown below:

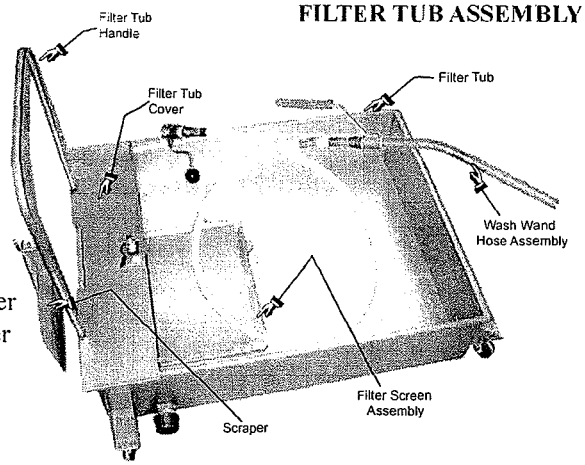
INPUT ELECTRICAL SERVICE	CURRENT TO ONE HEATING ELEMENT	
	14" VAT	18/20" VAT
208 VOLTS	23.6 AMPERES	27.8 AMPERES
240 VOLTS	20.4 AMPERES	24.0 AMPERES

FRYER OPERATION

GENERAL - The Model EUF Electric Fryer is equipped with a Central Filtration System which is located on a Filter Tub Caddy located beneath the left side of the fryer as shown below. The Toggle ON/OFF Switch and **AMBER** Power Indicator Lamp and **RED** Heat Mechanism Indicator Lamp are located on the Temperature Control Access Door. The Drain Lever and Filter Lever are located beneath the access door, and other controls are located behind the hinged door.



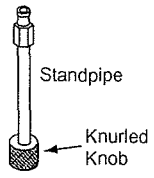
MODEL EUF
FILTER TUB ASSEMBLY

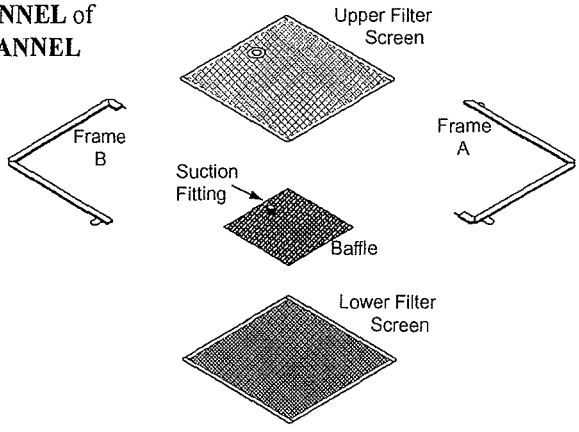


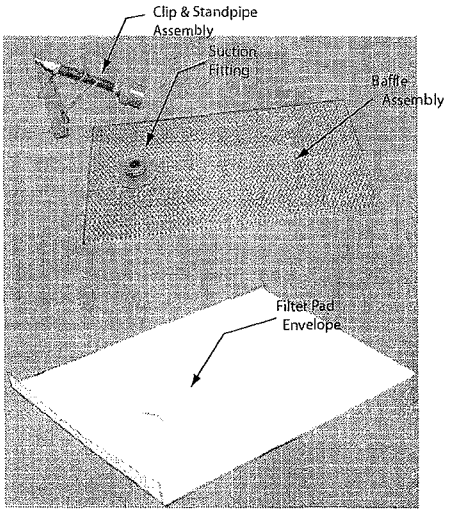
FILTER TUB ASSEMBLY - The Model EUF Filter Tub Assembly consist of a "Micro-Mesh Stainless Steel Filter" or a "Magnapad Paper Envelope Filter"; and a Filter Tub Handle, Filter Tub Cover, and Filter Tub as well as, a Wash Down Hose Assembly shown to the right.

A. Assemble a clean Filter Screen as follows:
   1. "Micro-Mesh" Stainless Steel Filter Screen
      a. Insert the **SUCTION FITTING** on the **BAFFLE** in the hole of the **UPPER FILTER SCREEN**; then place these items on top of the **LOWER FILTER SCREEN**.
      b. **ENSURE** all sides of the **FILTER SCREEN** assembly are aligned, place the **PIN** end of **FRAME A** on the **FILTER SCREENS**, place the **CHANNEL** on the frame adjacent to the **PIN** end over the FILTER SCREENS; then **HINGE** the frame so the edge of the FILTER SCREENS are inserted in the other **CHANNEL** of FRAME A.
      c. Place the **PIN** end of FRAME B on the FILTER SCREENS so the **PIN** is seated in the **CHANNEL** of FRAME A near the **FINGER LOOP**, place the **CHANNEL** on the frame adjacent to the PIN end over the edge of the FILTER SCREENS; then **HINGE** the frame so the edge of the FILTER SCREENS are inserted in the other **CHANNEL** of FRAME B and the **PIN** of FRAME A is seated in the **CHANNEL** of FRAME B .
      d. Adjust **FRAME A** and **B** so both **PINS** are properly seated in the **CHANNEL** of the opposite frame; then **CAREFULLY** connect the **KNURL KNOB** attached to the **STANDPIPE** to the **SUCTION FITTING** on the FILTER SCREEN assembly.

DO NOT OVERTIGHTEN !







2 "Magnepad Paper Envelope" Filter

a. Insert the **BAFFLE** into the **FILTER PAD ENVELOPE,** when inserted properly the **SUCTION FITTING** will protrude through the hole in the pad.

b. Fold **FLAP** over (in the direction of the hole), securing the Baffle inside the **FILTER PAD ENVELOPE.**

c. **CAREFULLY,** align the **CLIP & STANDPIPE ASSEMBLY** so that the **CLIP** can secure the **FLAP** on the Envelope and the **STANDPIPE** will align over the **SUCTION FITTING** protruding through the Envelope.

d. Tighten the Knurled **NUT** on the **STANDPIPE** on the **SUCTION FITTING** protruding through the Envelope.

B. Re-Assemble the Filter Tub as follows:

1. Make sure the FILTER TUB, HANDLE and COVER; WASH DOWN HOSE, SUCTION LINE HOSE, and FILTER ASSEMBLY are clean and dry.

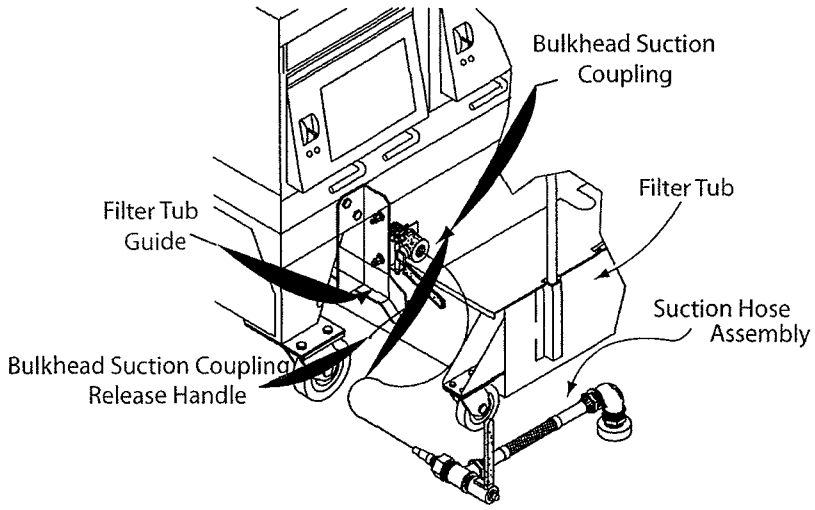
2. Assemble the Filter Tub by installling the components in the following sequence: 1) **FILTER ASSEMBLY,** 2) **COVER,** 3) **FILTER TUB HANDLE,** and 4) **SUCTION LINE HOSE.**

CAUTION: WHEN ASSEMBLED, ENSURE THERE ARE NO FINGER LOOPS ON THE STANDPIPE SIDE OF THE MICRO-MESH FILTER.

a. **CAREFULLY** insert the Filter Assembly in the bottom of the Filter Tub with the **STANDPIPE** centered in the handle end of the tub.

b. Place the cover on the Filter Tub; then install the Handle on the Filter Tub.

c. **SECURELY** connect the Suction Line Hose **FEMALE** Quick-Connect fitting to the **MALE** Quick-Connect Plug on the filter screen **STANDPIPE, CAREFULLY** insert the Filter Tub Assembly beneath the fryer; then **SECURELY** connect the **MALE** Quick-Connect fitting on the Suction Line Hose to the **FEMALE** Bulkhead Coupling shown below:



ULTRASTAT 21 COOKING COMPUTER OPERATION - The following are abbreviated operating procedures for a Model EUF Electric fryer equiped with an Ultrastat 21 Cooking Computer. The attached Ultrastat 21 Ultrafryer Computer Operation Instructions PN 30A009, contains **DETAILED** Operating, Filtering, Boil-Out and Programming Instructions.

NOTE: If the fryer is equipped with an Ultrastat 25 Cooking Computer proceed to page 22.

A. **START-UP** and **COOKING**

1. **ULTRASTAT 21 START-UP**- Safely start-up an Electric Fryer equipped with an Ultrastat 21 Cooking computer as follows:

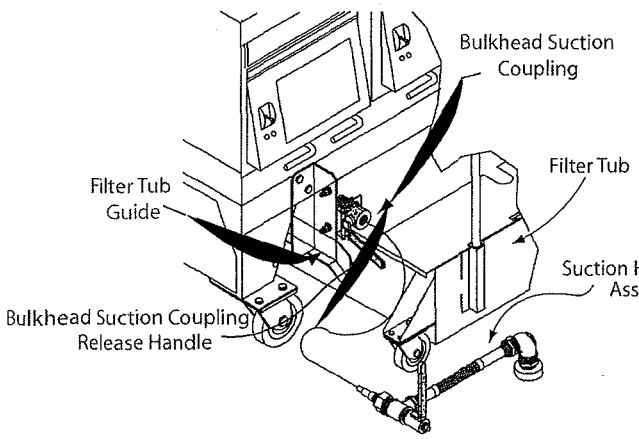
STEP	ACTION	RESPONSE
1	**ENSURE** the drain valve lever on the fryer is in the **CLOSED** position, shortening is at the proper level, then turn the fryer **TOGGLE ON/OFF** switch to the **ON** position.	A. The **AMBER** Power lamp beside the **TOGGLE ON/OFF** switch will **LIGHT.**
CAUTION: PRIOR TO PROCEEDING TO STEP 2 VISUALLY CHECK THAT THE HEAT MECHANISM IS COVERED WITH AT LEAST 2" (51 mm) OF SHORTENING.		
2	Turn the Computer **ON** by depressing the computer ON/OFF button.	A. The **MELT** lamp will **LIGHT** to indicate the computer is in the **SHORTENING MELT MODE.** B. The **HEAT** lamp on the computer and the **RED** heat mechanism indicator lamp on the fryer will cycle **ON** and **OFF** indicating the heat mechanism is periodically being turned **ON** and **OFF** to gently heat the shortening.
3	Once the **MELT LIMIT TEMPERATURE** is reached, depress the **EXIT MELT BUTTON** on the computer to cancel the **SHORTENING MELT MODE.**	A. **LO** will appear in the computer display indicating shortening temperature is more than 10°F (5°C) below the set-point temperature. B. The **HEAT** lamp on the computer and the **RED** heat mechanism indicator lamp will remain **ON** until the set-point temperature is reached.
4	When - - - - appears in the Computer display indicating the **SET-POINT TEMPERATURE** of the shortening has been reached, a **COOK** cycle can be initiated.	

2. **COOKING** - When the Computer is taken out of the **SHORTENING MELT MODE** each morning, shortening in the fryer vat will be heated near to its **SETPOINT** temperature and **"LO"** will appear in the display to indicate the shortening temperature is **MORE** than **10°F (5°C) BELOW** the setpoint temperature. When shortening temperature rises to the **SETPOINT** temperature - - - - will appear in the display indicating a **COOK CYCLE** can be started.

   a. **STARTING A COOK CYCLE**- To start a cook cycle simply press the [1] product key for the product you wish to cook. If the product is programmed, the correct cooking time will be displayed 1:20 (example) and this time will immediately start to count down in minutes and seconds. If donE is displayed immediately and the unit starts to signal, the key being operated is not programmed. If correctly programmed, it will count down to :00 followed by donE and start to signal. To turn this signal **OFF** and reset the Computer, press the [1] product key used to start the COOK CYCLE.

   b. **CANCELLING A COOK CYCLE** - If a cook cycle was inadvertently started it may be cancelled two (2) ways:
      1) Press and hold the same product key [1] used to start the cook cycle for **4 SECONDS.** This prevents an accidental cancelling of a cook cycle while a product is being cooked.
      2) A cook cycle can be **CANCELLED** at any time by turning the Ultrafryer Toggle ON/OFF Switch to the **OFF** position.

B. **FILTERING SHORTENING** - Assemble the Filter Tub as described on page 17, **SECURELY** connect the **FEMALE** Quick-Connect fitting on the Suction Line Hose to the **MALE** Quick-Connect plug on the filter screen **STANDPIPE,** insert the Filter Tub Assembly beneath the fryer on the **FILTER TUB GUIDES;** then **SECURELY** connect the **MALE** Quick-Connect **PLUG** on the Suction Line Hose to the **FEMALE** Bulkhead Coupling on the fryer as shown on the next page.



1. Turn the Toggle ON/OFF Switch on the fryer vat to be filtered **OFF**, place 16 ounces (.454 kg) by volume of **FILTER AGENT** in a 20" (508 mm) and 18" (457 mm) deep fryer vat; 14 ounces (.397 kg) in an 18" (457 mm **SHALLOW** fryer vat; and 8 ounces (.227 kg) in a 14" (356 mm) fryer vat; thoroughly stir the filter agent into the shortening using the skimmer, then skim the shortening to remove any floating crumbs.

CAUTION: PRIOR TO PROCEEDING TO THE NEXT STEP, PUT ON SAFETY GOGGLES, NEOPRENE INSULATED GLOVES AND AN APRON.

2. Carefully open the drain valve on the vat to be filtered by turning the **DRAIN LEVER** slightly downward. When the bottom of the filter tub is covered with about 2" (51 mm) of shortening, **OPEN** the drain valve and slowly drain shortening to allow the heat mechanism to gradually **COOL.**
3. When all shortening in the vat has drained into the filter tub, use the **DRAIN ROD** to stand the wire grill on one side of the vat.
4. Use the drain rod to break up the sediment cake on the bottom of the vat and to pull the sediment toward and into the Drain Valve Opening.
5. Use a scraper to remove encrusted material from the sides of the vat and a scrubbing pad to remove carbon buildup from the top and sides of the heat mechanism.
6. **SECURELY** connect the Wash Down Hose female **QUICK-CONNECT COUPLER** to the male **QUICK-CONNECT STEM** on the rear wall of the vat.

CAUTION: IF THE COUPLER IS NOT SECURELY ATTACHED TO THE STEM, HOT SHORTENING WILL BE DISCHARGED AROUND THE CONNECTION WHICH COULD CAUSE SEVERE BURNS.

7. Place the Wash Down Hose Nozzle into the fryer and hold it firmly against an inner wall. This prevents the hose from "recoiling upward" when the Filter Pump is turned on.
8. Turn the **FILTER PUMP LEVER** to the open **(DOWN)** position, hold the nozzle at a 45° angle from the bottom of the fryer causing shortening and debris to bounce off the rear wall of the vat and flow towards the drain valve opening.
9. Use the "L" shaped vat brush to push the sediment through the drain valve to keep the drain clear. Hose off the Heat Elements and all walls of the vat until all the shortening and residue at the bottom of the fryer has been flushed through the drain into the filter tub.
10. Turn the **FILTER PUMP LEVER** to the closed **(UP)** position, disconnect the Wash Down Hose **COUPLER** from the **STEM** on the rear wall of the vat; then hang the wash down hose in an upright position so shortening can drain into a container.

NOTE: Failure to hang the Wash Down Hose in an upright position to drian may cause the hose to become clogged with hardened shortening.

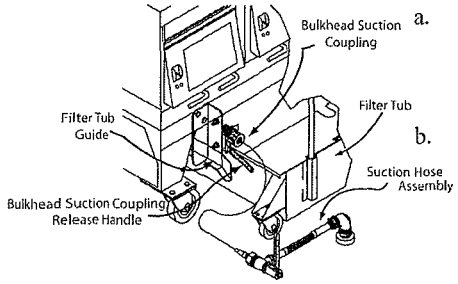
11. Replace the wire grill in the fryer with the **SHORTENING DEFLECTOR** on the right **COVERING** the quick-connect stem on the vat.
12. Set a timer for for the amount of time established for **POLISHING** shortening, then turn the **PUMP LEVER** to the open **(DOWN)** position to allow shortening to circulate through the system to **POLISH** the shortening.

CAUTION: DO NOT POLISH THE SHORTENING MORE THAN THE ESTABLISHED TIME AS IT WILL PUMP EXCESS AIR INTO THE SHORTENING CAUSING SHORTENING BREAKDOWN.

13. At the end of the established time, **TURN** the **FILTER PUMP LEVER**, and the **DRAIN VALVE LEVER** to the closed **UP** position; then **TURN** the **FILTER PUMP LEVER** to the OPEN **(DOWN)** position to automatically return shortening in the filter tub to the fryer vat.
14. When all shortening in the filter tub has been returned to the fryer, **TURN** the **FILTER PUMP LEVER** to the CLOSED **(UP)** position, check and if necessary add fresh shortening so shortening is level with the middle line of the letter **"E ←"** in the word **LEVEL** of the applicable shortening level mark on the rear wall of the fryer.
15. Disconnect the suction line hose from the standpipe and Fryer's Bulkhead Suction Coupling; then **THOROUGHLY** clean the filter tub assembly.

C. SHORTENING DISPOSAL/FRYER BOIL-OUT

1. **SHORTENING REMOVAL / DISPOSAL** - Fryer vats should be **BOILED-OUT** at least every 7 **DAYS** to remove carbon build up and other encrusted materials. Fryers with an Ultrastat 21 Cooking Computer with the **SHORTENING MANAGEMENT SYSTEM** should be **BOILED-OUT** when **diSP** appears in the computer display.



a. If the store is equipped with a Shortening Disposal System, remove used shortening from the fryer vat that is **CLOSEST** to the Shortening Disposal System connector. If the store is **NOT** equipped with a Shortening Disposal System, remove used shortening from the first fryer vat.

b. Assemble the Filter Tub as described on page 17, **SECURELY** connect the **FEMALE** Quick-Connect fitting on the Suction Line Hose to the **MALE** Quick-Connect plug on the filter screen **STANDPIPE**, insert the Filter Tub Assembly beneath the fryer on the **FILTER TUB GUIDES;** then **SECURELY** connect the **MALE** Quick-Connect **PLUG** on the Suction Line Hose to the **FEMALE** Bulkhead Coupling on the fryer as shown on the left.

c. Turn the **TOGGLE ON/OFF SWITCH** to the first vat **OFF.**

CAUTION: PRIOR TO PROCEEDING TO THE NEXT STEP, PUT ON SAFETY GOGLES, NEOPRENE INSULATED GLOVES AND AN APRON.

d. Turn the venthood Exhaust Fan **ON** and drain shortening from **EACH** fryer vat as follows:

1) Carefully open the drain valve by turning the **DRAIN LEVER** slightly downward. When the bottom of the filter tub is covered with about 2" (51 mm) of shortening, **OPEN** the drain valve and slowly drain shortening to allow the heat mechanism to gradually **COOL.**
2) When all shortening has drained into the filter tub, use the DRAIN ROD to stand the wire grill on one side of the vat.
3) Use a scraper to remove encrusted material from the sides of the vat and a scrubbing pad to remove carbon buildup from the top and sides of the heat mechanism.
4) **SECURELY** connect the Wash Down Hose female **QUICK-CONNECT COUPLER** to the male **QUICK-CONNECT STEM** on the rear wall of the vat.

CAUTION: IF THE COUPLER IS NOT SECURELY ATTACHED TO THE STEM, HOT SHORTENING WILL BE DISCHARGED AROUND THIS CONNECTION WHICH COULD CAUSE SEVERE BURNS.

5) Place the Wash Down Hose Nozzle into the fryer and hold it firmly against an inner wall. This prevents the hose from "recoiling up" when the filter pump is turned on.
6) Turn the **FILTER PUMP LEVER** to the open **(DOWN)** position, hold the nozzle at a 45° angle from the bottom of the fryer causing shortening and debris to bounce off the rear wall of the vat and flow towards the drain valve opening.
7) Use the "L" shaped vat brush to push the sediment through the valve to keep the drain clear. Hose off the burner tubes and walls of the vat until all the shortening and residue at the bottom of the fryer has been flushed through the drain into the filter tub.
8) Turn the **FILTER PUMP LEVER** to the closed **(UP)** position, disconnect the Wash Down Hose **COUPLER** from the **STEM** on the rear wall of the vat; then hang the wash down hose in an upright position so shortening can drain nto a container.
9) Dispose of used shortening as follows:
   a) Restaurants NOT equipped with a Shortening Disposal System
      (1) Connect the Wash Down Hose female **QUICK-CONNECT COUPLER** to the male **QUICK-CONNECT STEM** on the rear wall of the vat, place the hose nozzle into a **METAL** container and hold it firmly against an inner wall.
      (2) Turn the **FILTER PUMP LEVER** to the open **(DOWN)** position and pump shortening in the filter tub into the metal container.
      (3) When all shortening has been pumped into the container, turn the **FILTER PUMP LEVER** to the closed **(UP)** position, disconnect the Wash Down Hose **COUPLER** from the **STEM** on the rear wall of the vat; then hang the wash down hose in an upright position so shortening can drain into a container.
      (4) Remove any sediment from the Micro-Mesh filter screen using the filter tub scraper.

NOTE: Magnapad Paper Filter Assemblies **DO NOT** have to be **SCRAPED.**

      (5) Repeat steps d 1) through d 9) a) (4) above to remove shortening from each of the remaining vats into metal containers.

   b) Restaurants **EQUIPPED** with a Shortening Disposal System
      (1) **SECURELY** connect the Shortening Disposal System Hose fitting to the male **QUICK-CONNECT STEM** on the rear wall of the vat and connect the fitting on the other end of the hose to the Disposal System connector on the wall.

(2) Turn the **FILTER PUMP LEVER** to the open **(DOWN)** position and pump shortening in the filter tub into the exterior rendering tank.

(3) When all shortening has been pumped nto the rendering tank, turn the **FILTER PUMP LEVER** to the closed **(UP)** position, remove any sediment from the Micro-Mesh filter screen using the filter tub scraper.

NOTE: Magnapad Paper Filter Assemblies **DO NOT** have to be **SCRAPED.**

(4) Repeat steps d 1) through d 7) above; then, turn the **FILTER PUMP LEVER** to the closed **UP** position.

NOTE: Leave the Shortening Disposal Hose connected to the vat stem and Disposal System connector.

(5) Repeat steps 9) b) (1) through 9) b) (3) to remove shortening from all remaining vats to the existing render tanks.

10) When shortening has been removed from all Fryers, **THOROUGHLY** clean and re-assemble the filter tub.

2. FRYER BOIL-OUT

a. **BOIL-OUT** each fryer following cleaning instructions contained in the Cleaning Manual provided by your approved chemical supplier. The following are generic procedures:

1) Ensure all Drain Levers are in the closed **(UP)** position, then add water to each vat until it reaches a point two **2" (51 mm) BELOW** the middle line of the **"E ←"** in the word **LEVEL** of the **UPPER** shortening level mark on the rear wall of the vats.

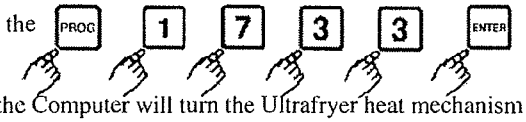
2) Add the amount of **BOIL-OUT COMPOUND** in each fryer vat as prescribed in the Cleaning Manual provided by the Chemical Supplier.

WARNING: ONLY USE A "NON-CHLORINE" BOIL-OUT COMPOUND!!!

3) Turn the Toggle ON/OFF switch and, if applicable, Manual Gas valve for each fryer vat to the **ON** position; then depress the Computer ON/OFF key to the **ON** position.

NOTE: The drain lever must be in the closed **UP** position to turn the computer **ON**.

4) Place the Computer in the **BOIL MODE** by pressing the following Computer keys in the order shown:



NOTE:  will appear in the Computer display and the Computer will turn the Ultrafryer heat mechanism ON and OFF to heat and maintain the boil-out solution to **190°F (88°C).**

5) When the boil-out solution reaches **190°F (88°C)** set a timer for 30 minutes. Frequently scrub the sides, front and rear of each fryer vat with a long handled scrub brush.

6) After the boil-out solution has **'BOILED'** for 30 minutes and the timer sounds press the following computer keys in the order shown to **EXIT BOIL MODE:**

7) Turn the Toggle ON/OFF Switch and, if applicable, the Manual Gas Valve for each fryer to their **OFF** position and **CAREFULLY** dispose of the boil-out solution in each fryer into a floor drain.

NOTE: Do not use the filter pump to remove water from the vats as this will cause premature pump failure and void the pump warranty.

8) Use a scrubbing pad to remove carbon buildup from the top of the heat mechanism. To remove carbon build-up on the sides and bottom of the heat mechanism; slide one end of a stropping pad under each section, grasp that end with a pair of tongs, and rock the pad up and down along the length of each section until all encrusted material has been removed.

9) Rinse each fryer with hot water until the water coming out of the drain valve is clear.

10) Mix a solution of **ONE PART** vinegar to **25 PARTS** of water. Place this mixture into a one gallon garden pressure sprayer; and **THOROUGHLY** spray this solution onto the **SIDES, HEAT MECHANISM,** and **BOTTOM** of each fryer to neutralize the Boil-Out Compound.

NOTE: Boil-Out Compound will cause shortening to break down rapidly if it is not neutralized.

11) **THOROUGHLY** wipe the sides, heat mechanism, and bottom of each fryer with clean, lint-free, dry towels to remove any remaining water; then fill each fryer with **NEW** shortening following procedures on page 5 of this manual.

ULTRASTAT 25 COOKING COMPUTER OPERATION - The following are abbreviated operating procedures for a Model EUF Electric fryer equiped with an Ultrastat 25 Cooking Computer. The attached Ultrastat 25 Ultrafryer Computer Operation Instructions PN 30A051, contains **DETAILED** Operating, Filtering, Boil-Out and Programming Instructions.

A. **START-UP** and **COOKING**

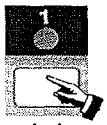
1. **ULTRASTAT 25 START-UP** - Safely start-up an Electric Fryer equipped with an Ultrastat 25 Cooking computer as follows:

STEP	ACTION	RESPONSE
1	**ENSURE** the drain lever on the fryer is in the **CLOSED** position, shortening is at the proper level, then turn the fryer **TOGGLE ON/OFF** switch to the **ON** position.	A. The **AMBER** Power lamp beside the **TOGGLE ON/OFF** switch will **LIGHT.**
2	Turn the Computer **ON** by depressing the computer ON/OFF key.	A. **MELT E, G,** or **P,** will appear in the computer Display to indicate the computer is in the **SHORTENING MELT MODE.** B. The **HEAT DEMAND** lamps on the computer and the **RED INDICATOR** lamp on the fryer will cycle **ON** and **OFF** indicating the heat mechanism is periodically being turned **ON** and **OFF** to gently heat the shortening.
3	When the **MELT RELEASE TEMPERATURE** is reached, the Melt Mode may be canceled by pushing the **OK/EXIT** key.	A. **LOW** will appear in the computer display indicating shortening temperature is more than the **READY BAND** below the (SETPOINT) temperature B. The **HEAT DEMAND** lamps on the computer and the **RED INDICATOR** lamp on the fryer will cycle **ON** and **OFF** indicating the heat mechanism is being periodically turned **ON** and **OFF** to gently heat the shortening.
4	When **READY** appears in the computer display indicating the shortening temperature is no more than the **READY BAND** below (SETPOINT) and is no higher than 40°F (22°C) above the (SETPOINT) temperature, a **COOK** cycle can be intiated. **NOTE:** The **READY BAND** is factory set according to the customer's order, usually set at 10°F (5°C).	

2. **COOKING**

When the Computer is taken out of the **SHORTENING MELT MODE** each morning, shortening in the fryer vat will be heated to its SETPOINT temperature and **"LOW"** will appear in the display to indicate the shortening temperature is MORE than the **READY BAND** temperature **BELOW** the setpoint temperature. When shortening temperature rises to the **SETPOINT** temperature **READY** will appear in the display indicating a **COOK CYCLE** can be started.

a. **STARTING A COOK CYCLE**



To start a cook cycle, simply press the product key you wish to cook. If the product key is programmed, the Product Key **LED** will **BLINK FAST** and **CK 1** and correct cooking time will be displayed, (example, **14:00**) and this time will immediately start to count down in minutes and seconds. If correctly programmed, the computer will count down to **00 : 00** , the alarm will **SOUND** and **DONE 1** will appear in the display. Press Product Key 1 to silence the alarm and reset that product key for another cook cycle.

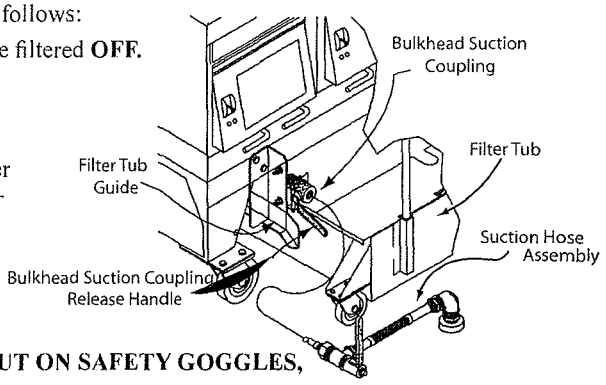
b. **CANCELLING A COOK CYCLE**

If a cook cycle was inadvertently started it may be cancelled two (2) ways:

1) Press and hold the same product key used to start the cook cycle for **4 SECONDS.** This prevents an accidental cancelling of a cook cycle while a product is being cooked.
2) A cook cycle can be **CANCELLED** at any time by turning the Ultrafryer Toggle ON/OFF SWITCH to the **OFF** position.

B. **FILTERING SHORTENING** - In many restaurant situations shortening in the Ultrafryer should be filtered at least twice a day, once after the lunch rush and again after the dinner rush. Other users may establish filter frequencies in line with their oil cleaning requirements and programmed filter prompts. The fryer vat used to cook French Fries should be filtered **FIRST**, followed by fryer vats for other products.

1. Assemble and install the Filter Tub, and connect the suction line hose as described on page 17.
2. When the **FILTER PROMPT FEATURE** has been activated and **FILTER** appears in the display, alternating with a normal display; 1) press the key to display the current **HITS**, 2) press the key again to display the current **TIME PROMPT** time and 3) plan to filter shortening at the next convenient time.
3. When it is convenient to filter shortening, filter each fryer as follows:
   a. Turn the **TOGGLE ON/OFF SWITCH** for the vat to be filtered **OFF.**



CAUTION: DO NOT TURN THE COMPUTER OFF!!

   b. Place **16 OUNCES (.45 kg)**, by volume, of **FILTER AGENT** in a 20" (508 mm) and 18" (457 mm) deep fryer vat, 14 ounces (.39 kg) in an 18" (457 mm) shallow fryer vat and 8 ounces (.23 kg) in a 14" (356 mm) fryer vat; thoroughly stir the filter agent into the shortening using the skimmer, then skim the shortening to remove any floating crumbs.

CAUTION: PRIOR TO PROCEEDING TO THE NEXT STEP, PUT ON SAFETY GOGGLES, NEOPRENE INSULATED GLOVES AND AN APRON.

   c. Carefully open the drain valve on the vat to be filtered and polished by turning the **DRAIN LEVER** slightly downward, **DRAINING** alternating with **FILTER** will appear in the Computer display. When the bottom of the filter tub is covered with about two (2) inches (51 mm) of shortening, **OPEN** the drain lever and slowly drain shortening to allow the heat mechanism to gradually **COOL.**
   d. When all shortening in the vat has drained into the filter tub, use the **DRAIN ROD** to stand the wire grill on one side of the vat.
   e. Use the drain rod and/or the "L" shaped brush to pull the sediment on the bottom of the vat towards the valve opening, then use the rod to push sediment through the valve opening.
   f. **SECURELY** connect the Wash Down Hose **QUICK-CONNECT COUPLER** to the **QUICK-CONNECT STEM** on the rear wall of the vat (pull the coupler bracket with the **BLACK** knob towards the hose, place the coupler over the stem until it is **SEATED**, then release the coupler bracket). A distinct **CLICK** will be heard when the coupler seats on the stem.

CAUTION: IF THE COUPLER IS NOT SECURELY ATTACHED TO THE STEM, HOT SHORTENING WILL BE DISCHARGED AROUND THIS CONNECTION WHICH COULD CAUSE SEVERE BURNS.

   g. Place the Wash Down Hose Nozzle into the vat and hold it firmly against the inner wall. This prevents the hose from "jumping" when the Filter Pump is turned on.
   h. Turn the **PUMP LEVER** to the open **(DOWN)** position, hold the nozzle at a 45 degree angle from the bottom of the vat causing the shortening and debris to bounce off the rear wall of the vat and flow towards the drain valve.
   i. Use the drain rod and/or **"L"** Shaped Brush to push the sediment through the drain valve to keep the drain clear. Hose off the Heat Mechanism and all walls of the vat until all the shortening and residue at the bottom of the vat has been flushed through the drain into the filter tub.
   j. Turn the **PUMP LEVER** to the closed **(UP)** position, and then disconnect the Wash Down Hose **QUICK-CONNECT COUPLER** from the **QUICK-CONNECT STEM** on the rear wall of the vat.
   k. Replace the wire grill in the fryer with the **SHORTENING DEFLECTOR** on the **RIGHT SIDE** of the vat, COVERING the quick-connect stem.
   l. Set a Timer for for the amount of time established by your Operations Department for **POLISHING** the shortening; then turn the **PUMP LEVER** to the open **(DOWN)** position to allow shortening in the filter tub to circulate through the system.

CAUTION: DO NOT POLISH THE SHORTENING LONGER THAN THE ESTABLISHED TIME AS IT WILL PUMP EXCESS AIR INTO THE SHORTENING CAUSING SHORTENING BREAKDOWN.

NOTE: The filter pump system can **ONLY** be operated when the fryer's Toggle **ON/OFF** switch is in the **OFF** position and the filter pump lever is in the **OPEN (DOWN)** position. When the filter system is in operation, the Computer .5**CANNOT** be turned **ON** and the Heat Mechanism **CANNOT** be activated.

   m. When **POLISHING** is complete, turn the **PUMP LEVER** and **DRAIN LEVER** to the closed **(UP)** position.
   n. Turn the Pump Lever to the open **(DOWN)** position to automatically return the shortening in the filter tub to the vat.

o. When all shortening has been returned to the vat, turn the Pump Lever to the closed (UP) position, then **CAREFULLY** remove any sediment from the permanent filter screen using the Filter Tub Scraper.

p. Add shortening to the fryer, if applicable.

q. Repeat step 3 a. through 3 p. to filter and polish shortening in the remaining vats.

r. When all vats have been filtered and polished, **IMMEDIATELY** hang the Wash Down Hose assembly in an upright position so shortening can drain into a container, and disconnect the **SUCTION LINE HOSE** from the **STANDPIPE**, and remove the filter tub from beneath the fryer bank.

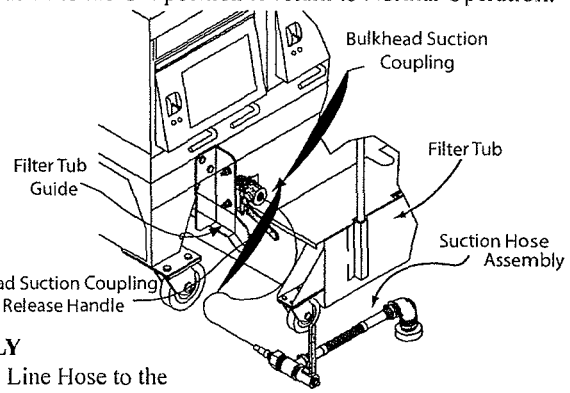
NOTE: Failure to hang the Wash Wand Hose in an upright position to drain may cause the hose to become clogged with hardened shortening.

s. **THOROUGHLY** clean the Filter Tub Assembly according to procedure in paragraph A. page 28.

t. **RESUME NORMAL OPERATIONS - VISUALLY** check and if necessary, add fresh shortening to each fryer vat until shortening reaches the middle line of the **"E ←"** in the word **LEVEL** of the applicable shortening level mark on the rear wall of the fryer; then turn the Toggle ON/OFF button to the **ON** position to return to Normal Operation.

C. SHORTENING DISPOSAL/FRYER BOIL-OUT

1. **SHORTENING REMOVAL / DISPOSAL** - Fryer vats should be **BOILED-OUT** at least every **7 DAYS** to remove carbon build up and other encrusted materials.



a. If the store is equipped with a Shortening Disposal System, remove used shortening from the fryer vat that is **CLOSEST** to the Shortening Disposal System connector. If the store is **NOT** equipped with a Shortening Disposal System, remove used shortening from the first fryer vat.

b. Assemble the filter Tub as described on page 17, **SECURELY** connect the **FEMALE** Quick-Connect fitting on the Suction Line Hose to the **MALE** Quick-Conneck **PLUG** on the filter screen **STANDPIPE**, insert the Filter Tub Assembly on the **FILTER TUB GUIDES** beneath the fryer until it is butted against the **FILTER TUB STOP;** then **SECURELY** connect the **MALE** plug on the Suction Line Hose to the **FEMALE** Bulkhead Coupling on the fryer as shown above.

c. Turn the **TOGGLE ON/OFF SWITCH** to the first vat **OFF.**

CAUTION: PRIOR TO PROCEEDING TO THE NEXT STEP, PUT ON SAFETY GOGGLES, NEOPRENE INSULATED GLOVES AND AN APRON.

d. Turn the venthood Exhaust Fan **ON** and drain shortening from **EACH** fryer vat as follows:

1) Carefully open the drain valve by turning the **DRAIN LEVER** slightly downward. When the bottom of the filter tub is covered with about 2" (51 mm) of shortening, **OPEN** the drain valve and slowly drain shortening to allow the heat mechanism to gradually **COOL.**

2) When all shortening has drained into the filter tub, use the DRAIN ROD to stand the wire grill on one side of the vat.

3) **SECURELY** connect the Wash Down Hose **QUICK-CONNECT COUPLER** to the **QUICK-CONNECT STEM** on the rear wall of the vat (pull the coupler bracket with the **BLACK** knob towards the hose, place the coupler over the stem until it is **SEATED**, then release the coupler bracket). A distinct **CLICK** will be heard when the coupler seats on the stem.

CAUTION: IF THE COUPLER IS NOT SECURELY ATTACHED TO THE STEM, HOT SHORTENINGWILL BE DISCHARGED AROUND THIS CONNECTION WHICH COULD CAUSE SEVERE BURNS.

4) Place the Wash Down Hose Nozzle into the vat and hold it firmly against the inner wall. This prevents the hose from "jumping" when the Filter Pump is turned on.

5) Turn the **PUMP LEVER** to the ON **(DOWN)** position, hold the nozzle at a 45° angle from the bottom of the vat causing the shortening and debris to bounce off the rear wall of the fryer and flow towards the drain valve.

6) Use the drain rod to push the sediment through the drain valve to keep the drain clear. Hose off the heat mechanism and all walls of the fryer vat until all the hortening and residue on the bottom of the vat has been flushed through the drain into the filter tub.

7) Turn the **PUMP LEVER** and **DRAIN LEVER** to the OFF/CLOSED **(UP)** position.

8) Dispose of used shortening as follows:

a) Restaurants **NOT** equipped with a Shortening Disposal System:

(1) Place the Wash Down Hose nozzle into a **METAL** container and hold it firmly against an inner wall. This prevents the hose from "jumping" when the Filter Pump is turned on.

(2) Turn the **PUMP LEVER** to the ON (**DOWN**) position and pump shortening from the filter tub into the metal container.

(3) When all shortening in the filter tub has been pumped into the metal container, turn the **PUMP LEVER** to the OFF (**UP**) position and remove any sediment from the permanent filter screen using the filter tub scraper.

NOTE: Magnepad Paper Filter Assemblies **DO NOT** have to be **SCRAPED.**

(4) Repeat steps **dl), d2), d3), d4), d5), d6), d7), d8) a) (1)** through **(3)** above to remove shortening from remaining vats to metal containers.

b) Restaurants **EQUIPPED** with a Shortening Disposal System:

(1) Remove the Wash Down Hose from the stem on the rear wall of the vat and **SECURELY** connect the Shortening Disposal Hose to the stem.

(2) **SECURELY** connect the fitting on the other end of the Shortening Disposal Hose to the Disposal System connector on the wall.

(3) Turn the Pump Lever to the ON (**DOWN**) position and pump shortening from the filter tub into the exterior rendering tank.

(4) When all shortening has been suctioned from the filter tub, turn the Pump Lever to the OFF (**UP**) position, and remove any sediment from the permanent filter screen using the Filter Tub Scraper.

NOTE: Leave the Shortening Disposal Hose connected to vat stem and Disposal System connector.

(5) Repeat steps d1), d2), d3), d4), d5), d6), and d7) to drop shortening from the next vat into the filter tub.

(6) Remove the Wash Down Hose from the stem on the rear wall of this vat; then turn the Pump Lever on the fryer **CLOSEST** to the Shortening Disposal System to the ON (**DOWN**) position to pump shortening from the filter tub into the exterior rendering tank.

(7) When all shortening has been suctioned from the filter tub, turn the Pump Lever to the OFF (**UP**) position, and remove any sediment from the permanent filter screen using the Filter Tub Scraper.

(8) Repeat steps d 8) b) (5), (6), and(7) above to remove shortening from the remaining fryer vats to the exterior rendering tank.

(9) Remove the Shortening Disposal Hose/Wash Down Hose from the stem on the rear wall of the fryer and replace the wire grill in each vat with the **SHORTENING DEFLECTOR** on the **RIGHT SIDE** of the vat **COVERING** the quick-connect stem.

(10) **IMMEDIATELY** hang the Wash Down Hose and, if applicable the Shortening Disposal Hose in an upright position and **THOROUGHLY** clean and reassemble the filter tub.

2. FRYER BOIL-OUT

a. **BOIL-OUT** each fryer following cleaning instructions contained in the Cleaning Manual provided by your approved chemical supplier. The following are generic procedures:

1) Ensure all Drain Levers are in the closed **(UP)** position, then add water to each vat until it reaches a point 2" (51 mm) **BELOW** the middle line of the **"E ← "** in the word **LEVEL** of the **UPPER** shortening level mark on the rear wall of the vats.

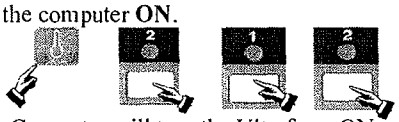
WARNING: ONLY USE A COMMERCIAL GRADE "NON-CHLORINE" BOIL-OUT COMPOUND!!

2) Add the amount of **BOIL-OUT COMPOUND** in each fryer vat as prescribed in the Cleaning Manual provided by the Chemical Supplier.

3) Turn the Toggle ON/OFF switch for each fryer vat to the **ON** position; then depress the Computer ON/OFF Key to the **ON** position.

NOTE: The Drain Lever must be in the closed **UP** position to turn the computer **ON.**

4) Place the Computer in the **BOIL MODE** by pressing the following Computer keys in the order shown:



NOTE: BOIL 30:00 will appear in the Computer display and the Computer will turn the Ultrafryer ON and OFF to heat and maintain the boil-out solution at 192°F (89°C).

5) Frequently scrub the sides, front and rear of each fryer vat with a long handled synthetic bristle scrub brush.

6) After the boil-out solution has **BOILED"** for 30 minutes and the alarm sounds, press the  key to **EXIT BOIL MODE.**

7) Turn the Toggle ON/OFF Switch for each fryer to their **OFF** position and **CAREFULLY** dispose of the boil-out solution in each fryer in a floor drain.

NOTE: Do not use the filter pump to remove water from the vats as this will cause premature pump failure and void the pump warranty.

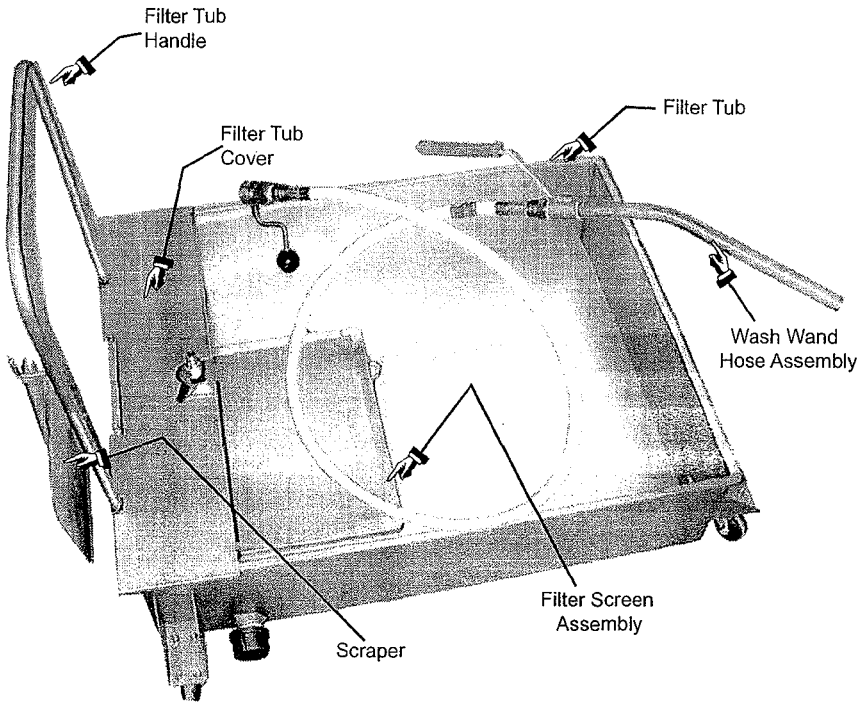
8) Use a scrubbing pad to remove carbon buildup from the top of the heat mechanism. To remove carbon buildup on the sides and bottom of the heat mechanism; slide one end of a stropping pad under each heat mechanism, grasp that end with a pair of tongs, and rock the pad up and down along the length of each heat mechanism until all encrusted material has been removed.
9) Rinse each fryer with hot water until the water coming out of the drain valve is clear.
10) Mix a solution of **ONE PART** vinegar to **25 PARTS** of water. Place this mixture into a one gallon garden pressure sprayer; and **THOROUGHLY** spray this solution onto the **SIDES, HEAT MECHANISM,** and **BOTTOM** of each fryer to neutralize the Boil-Out Compound.

NOTE: Boil-Out Compound will cause shortening to break down rapidly if it is not neutralized.

11) **THOROUGHLY** wipe the sides, heat mechanism, and bottom of each fryer with clean, lint-free, dry towels to remove any remaining water; then fill each fryer with **NEW** shortening following procedures on page 5 of this manual.
12) After the fryer has been filled with new shortening, place the computer in the **FEATURE PROGRAMMING MODE** and set the **DISPOSAL HIT COUNT (DHC #####)** to "0" to clear the **DISPOSE PROMPT** ; then press the **SET** key on the computer to exit the programming mode and return to normal operation.

CLEANING

CLEANING - Any item of equipment operates better and lasts longer when it is kept cleaned and properly maintained, and the **ULTRAFRYER** and **FILTER TUB ASSEMBLY** are no exception. Clean the **FILTER SCREEN** after Filtering Shortening and at Closing; and **THOROUGHLY** clean the **FILTER TUB ASSEMBLY** each **DAY** and **WEEK** as described below.

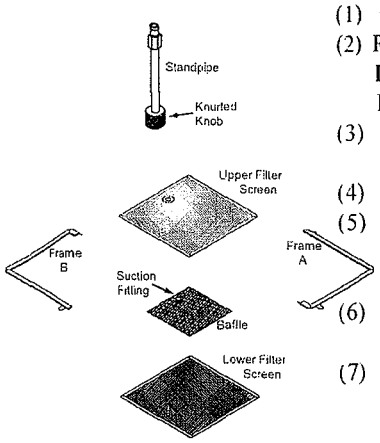


A. Daily

1. Clean the Filter Tub and Filter Assembly after **FILTERING** and **AT CLOSING** as follows:

   a. After Filtering Shortening:

      1) Disassemble the Filter Tub by removing the following items in the order listed; (1) **FILTER TUB HANDLE,** (2) **COVER,** (3) **WASH DOWN HOSE,** (4) **SUCTION LINE HOSE,** and (5) **FILTER ASSEMBLY.**
      2) Clean the Suction Line Hose and Wash Down Hose with sanitizer solution; then hang these hoses in an upright position so any shortening can drain into a container.
      3) Raise the Filter Assembly above the Filter Tub and let any sediment or shortening drain into the tub; then **THOROUGHLY** clean the filter assembly as follows:
         a) "Micro-Mesh" Stainless Steel Filter Screen



            (1) **CAREFULLY** remove any debris from the screen using a scraper.
            (2) Remove the **STANDPIPE** and **KNURL** knob from the **FILTER SCREEN** assembly, grasp the **FINGER LOOP** on **FRAME A** and adjacent **FINGER LOOP** on **FRAME B**, **EVENLY** pull the frames apart; then **HINGE** FRAME A to remove it from the **FILTER SCREENS FIRST.**
            (3) Grasp the **FINGER LOOP** on the straight side of **FRAME B**; then **HINGE** it to remove FRAME B from the **FILTER SCREENS.**
            (4) Separate the **UPPER FILTER SCREEN** and **BAFFLE** from the **LOWER FILTER SCREEN.**
            (5) **CAREFULLY** clean the two frames, screens and baffle in the 3 compartment sink with hot water and allow these items to air dry. **DO NOT USE SOAP.** If necessary the channels in each frame can be cleaned with the edge of a scotch-brite pad.
            (6) Insert the **SUCTION FITTING** on the **BAFFLE** in the hole of the **UPPER FILTER SCREEN**; then place these items on top of the **LOWER FILTER SCREEN.**
            (7) **ENSURE** all sides of the **FILTER SCREEN** assembly are aligned, place the **PIN** end of **FRAME A** on the **FILTER SCREENS**, place the **CHANNEL** on the frame adjacent to the **PIN** end over the FILTER SCREENS; then **HINGE** the frame so the edge of the FILTER SCREENS are inserted in the other **CHANNEL** of FRAME A.
            (8) Place the **PIN** end of FRAME B on the FILTER SCREENS so the **PIN** is seated in the **CHANNEL** of FRAME A near the **FINGER LOOP**, place the **CHANNEL** on the frame adjacent to the PIN end over the edge of the FILTER SCREENS; then **HINGE** the frame so the edge of the FILTER SCREENS are inserted in the other **CHANNEL** of FRAME B and the **PIN** of FRAME A is seated in the **CHANNEL** of FRAME B .

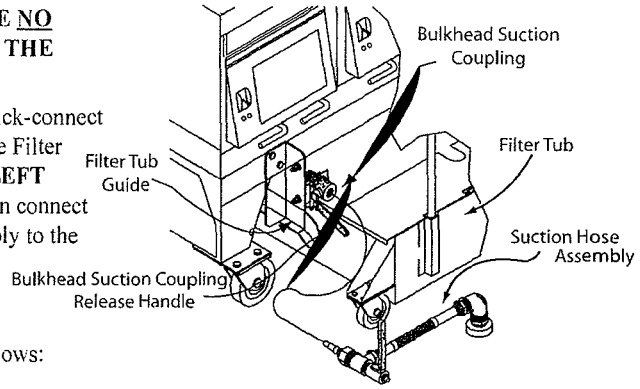
(9) Adjust **FRAME A** and **B** so both **PINS** are properly seated in the **CHANNEL** of the opposite frame; then **CAREFULLY** connect the **KNURL KNOB** and **STANDPIPE** to the **SUCTION FITTING** on the FILTER SCREEN assembly. **DO NOT OVERTIGHTEN!!!**

b) "Magnepad Paper Envelope" Filter: Magnepad Paper Filter Assemblies **DO NOT** have to be **SCRAPED** after filtering shortening.

4) Remove any sediment and shortening in the Filter Tub using a scraper; then wipe the tub dry with paper towels.

5) Carefully insert the Filter Assembly in the bottom of the Filter Tub with the **STANDPIPE** centered in the handle end of the tub.

WARNING: WHEN ASSEMBLED, ENSURE THERE ARE NO FINGER LOOPS ON THE STANDPIPE SIDE OF THE FILTER.



6) Install the Suction Line Hose Assembly female quick-connect fitting on the Filter Screen **STANDPIPE**, insert the Filter Tub on the **FILTER TUB GUIDES** beneath the **LEFT** side of the fryer until it hits the **STOP** bracket; then connect the **MALE** plug on the Suction Line Hose Assembly to the **BULKHEAD** Suction Coupling on the fryer.

b. At Closing

1) Repeat **DAILY** steps A 1 a 1) thru A 1 a 3) above.

2) **THOROUGHLY** clean the Filter Assembly as follows:

a) "Micro-Mesh" s/s Filter Screen:

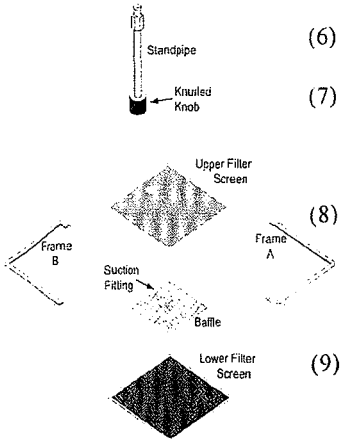
(1) **THOROUGHLY** flush any remaining sediment from both sides of the filter screen with **HOT WATER.**

(2) Remove the **STANDPIPE** and **KNURL** knob from the **FILTER SCREEN** assembly, grasp the **FINGER LOOP** on **FRAME A** and adjacent **FINGER LOOP** on **FRAME B, EVENLY** pull the frames apart; then **HINGE FRAME A** to remove it from the **FILTER SCREENS FIRST.**

(3) Grasp the **FINGER LOOP** on the straight side of **FRAME B**; then **HINGE** it to remove **FRAME B** from the **FILTER SCREENS.**

(4) Separate the **UPPER FILTER SCREEN** and **BAFFLE** from the **LOWER FILTER SCREEN.**

(5) **CAREFULLY** clean the two frames, screens and baffle in the 3 compartment sink with hot water and allow these items to air dry. **DO NOT USE SOAP.** If necessary the channels in each frame can be cleaned with the edge of a scotch-brite pad.



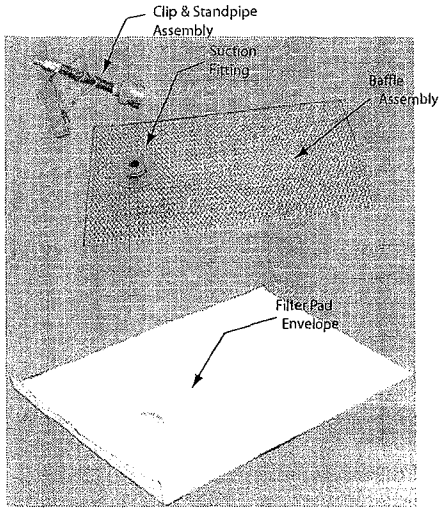
(6) Insert the **SUCTION FITTING** on the BAFFLE in the hole of the **UPPER** FILTER SCREEN; then place these items on top of the **LOWER** FILTER SCREEN.

(7) **ENSURE** all sides of the FILTER SCREEN assembly are aligned, place the **PIN** end of **FRAME A** on the FILTER SCREENS, place the **CHANNEL** on the frame adjacent to the **PIN** end over the FILTER SCREENS; then **HINGE** the frame so the edge of the FILTER SCREENS are inserted in the other **CHANNEL** of FRAME A.

(8) Place the **PIN** end of **FRAME B** on the FILTER SCREENS so the **PIN** is seated in the **CHANNEL** of **FRAME A** near the **FINGER LOOP**, place the **CHANNEL** on the frame adjacent to the **PIN** end over the edge of the FILTER SCREENS; then **HINGE** the frame so the edge of the FILTER SCREENS are inserted in the other **CHANNEL** of **FRAME B** and the **PIN** on **FRAME B** is seated in the **CHANNEL** of **FRAME A.**

(9) Adjust **FRAME A** and **B** so other **PINS** are properly seated in the **CHANNEL** of the opposite frame; then **CAREFULLY** connect the **KNURL KNOB** and **STANDPIPE** to the **SUCTION FITTING** on the FILTER SCREEN assembly. **DO NOT OVERTIGHTEN!!!**

b) "Magnepad" Envelope Filter - Remove and discard the **USED** Filter Pad Envelope, **CAREFULLY** clean the Baffle Assembly and Clip / Standpipe Assembly in the 3 compartment sink with **HOT** water and allow these items to air dry. **DO NOT USE SOAP!!** Re-assemble the Magnepad Envelope Filter using a **NEW** Filter Pad Envelope as follows:



(1) Insert the **BAFFLE** into the **FILTER PAD ENVELOPE**, when inserted properly the **SUCTION FITTING** will protrude through the hole in the pad.
(2) Fold **FLAP** over (in the direction of the hole), securing the Baffle inside the **FILTER PAD ENVELOPE.**
(3) **CAREFULLY**, align the **CLIP & STANDPIPE ASSEMBLY** so that the **CLIP** can secure the **FLAP** on the Envelope and the **STANDPIPE** will align over the **SUCTION FITTING** protruding through the Envelope.
(4) Tighten the knurled **NUT** on the **STANDPIPE** to the **SUCTION FITTING** protruing through the Envelope.

3) Repeat DAILY steps A1 a 4) through steps A1 a 6) page 29.

B. **WEEKLY**

1. Perform the daily cleaning steps A 1 a 1) through A 1 a 3) above.

2. Clean the Filter Assembly as follows:
   a) "Micro-Mesh" stainless steel filter screen:
      1) Disassemble the filter according to **DAILY** steps A 1 a 3) a) (1) through A 1 a 3) a) (4) and clean the two (2) frames as described in step A 1 a 3) a) (5).
      2) Place the upper and lower **FILTER SCREENS** in the fryer with **BOIL-OUT SOLUTION** for cleaning. **DO NOT PLACE THE BAFFLE OR STANDPIPE IN THIS SOULUTION!!! BOIL-OUT** the fryer vat according to instructions contained in the cleaning manual provided by your chemical supplier.
      3) After the filter screens have been cleaned in the Boil-Out Solution, **ENSURE** they are **THOROUGHLY** sprayed with a solution of **1 PART** vinegar to **25 PARTS** of water to **NEUTRALIZE** the boil-out solution, then allow the screens to air dry. **NOTE:** any residue of boil-out solution on the filter screens could cause the rapid break-down of the shortening.
      4) Reassemble the "Micro-Mesh stainless steel filter screen according to **DAILY** steps A 1 a 3) a) (6) through A 1 a 3) a) (9).
   b) "Magnepad" Envelope Filter - Disassemble, clean, and re-assemble the "Magnepad" Filter Assembly according to **DAILY** cleaning steps A 1 b 2) b) above.

3. **THOROUGHLY** clean the Filter Tub and Cover with **HOT SANITIZER SOLUTION** and allow them to air dry.

4. Re-assemble the Filter Tub according to **DAILY** steps A 1 a 5) and A 1 a 6) (pg 29).

WARNING: WHEN ASSEMBLED, ENSURE THERE ARE <u>NO</u> FINGER LOOPS ON THE STANDPIPE SIDE OF THE MICRO-MESH FILTER.

MAINTENANCE

1. **MAINTENANCE** - The Fenwal Temperature Controller or Electronic Thermostat seldom need adjusted if properly set during the initial installation. If necessary, adjust the Fenwal Temperature Control or Electronic Thermostat according to the following procedures.

2. **FENWAL TEMPERATURE CONTROLLER ADJUSTMENT** - If the Fenwal Temperature Controller or Electronic Thermostatis found to be **MORE THAN ±7°F (± 4°C)** from the desired cook temperature, they should be adjusted by a **QUALIFIED REPAIRMAN** as follows:

A. **EQUIPMENT REQUIRED:**

1) Fluke Model 51 Digital Thermometer w/ Type K "Bead" Thermo-Couple Temperature probe or equivalent **ACCURATE** digital thermometer and probe.

2) Shortening Skimmer w/ long handle.

3) Two (2) screwdrivers, one with a 1/8" (3mm) blade and one with a ¼" (6mm) blade.

B. **PRECAUTIONS:**

1) If the **AVERAGE** temperature computed in step C 10) falls within a range of ±7° F (± 4°C) of the cook temperature, the Fenwal Temperature Controller is operating properly and should not be adjusted.

2) **PRIOR** to checking/adjusting a Fenwal Temperature Controller, **ENSURE** the shortening **BENEATH** the heat tubes is in a liquid state, shortening has **STABILIZED** at the normal cook temperature and the shortening is **THOROUGHLY** stirred in a **COUNTER-CLOCKWISE (CCW)** direction.

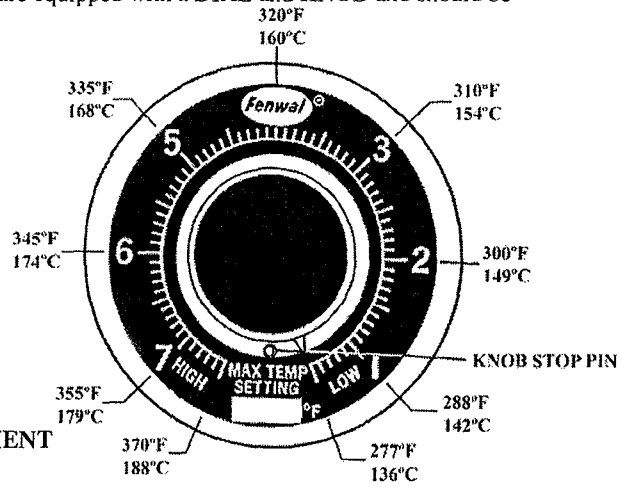
3) The Fenwal Temperature Controller adjustment shaft is **EXTREMELY SENSITIVE.** One (1) **FULL** turn (360°) of the adjustment shaft will change shortening temperature 100° F (56°C). The approximate change of shortening temperature per movement of the adjustment shaft is as follows:

MOVEMENT	TEMPERATURE CHANGE
1/8 TURN	12.5° F (7°C)
1/4 TURN	25° F (14°C)
1/2 TURN	50° F (28°C)
3/4 TURN	75° F (42°C)
1 TURN	100° F (56°C)

NOTE: To **INCREASE** shortening temperature turn the adjustment shaft to the **LEFT** (counter clockwise).
To **DECREASE** shortening temperature, turn the adjustment shaft to the **RIGHT** (clockwise).

C. **FENWAL TEMPERATURE CONTROLLER TEMPERATURE CHECK/ADJUSTMENT PROCEDURES:**

Fenwal Temperature Controllers in **ALL** fryer configurations are equipped with a DIAL and KNOB and should be checked / adjusted as follows:



1) **ENSURE** electrical power and gas to the vat has been turned **OFF.**

2) **CAREFULLY** drain sufficient shortening from the vat to **LOWER** the shortening about 4" (102 mm) beneath the Fenwal Temperature Controller sensing element.

3) After the sensing element has **COOLED**, loop the Bead Type K temperature probe around the sensing element, connect the temperature probe to the Fluke thermometer, set the **KNOB** pointer to the **LOW** setting (**MAXIMUM CLOCKWISE POSITON**), then **CAREFULLY** loosen the knob set screw and remove the knob form adjustment shaft. **TAKE CARE TO NOT TURN THE ADJUSTMENT SHAFT.**

4) Replace shortening drained in step 2). and **ENSURE** it is level with the shortening level mark.

5) Turn electrical power and gas to the vat ON and start the fryer to heat the shortening.

6) Periodically STIR shortening in a **COUNTER-CLOCKWISE (CCW)** direction with a **LONG** handle skimmer to pull congealed shortening **UPWARD** from the cold zone area beneath the heat tubes.

CAUTION: ALL SHORTENING MUST BE IN A LIQUID STATE AND EVENLY HEATED PRIOR TO ADJUSTING A FENWAL TEMPERATURE CONTROLLER!

7) When the shortening has reached temperature and the burner has cut-off, allow the temperature controller to **CYCLE ON** and **OFF** about 3 times to **STABILIZE** shortening temperature.

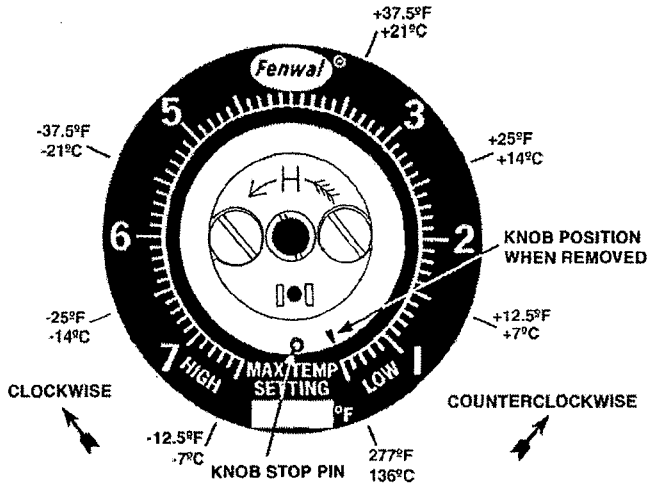
8) After shortening temperature has become **STABLE**, continue to stir the shortening in a **CCW** direction. When the fryer **SHUTS OFF**, record the temperature displayed on the fluke digital thermometer and when the fryer **TURNS ON** record the temperature displayed on the thermometer.

9) Compute the **AVERAGE** of the two (2) temperature readings recorded in step 8). For example: **SHUT-OFF** temprature = 343° F (173°C), **TURN-ON** temperature = 339° F (171°C), then **AVERAGE** temperature = 341° F (172°C).

10) If the **AVERAGE** temperature computed in step 9). falls within a range of ±7° F (±4°C) of the cook temperature, the Fenwal Temperature Controller is operating properly and should not be adjusted. If the **AVERAGE** temperature computed above is more than ± 7° F (± 4°C) from the cook temperature, the Fenwal Temperature Controller should be adjusted as follows:

a) If the **AVERAGE** temperature computed above is **HIGHER** than the desired cook temperature, the adjusting screw should be turned to the **RIGHT (clockwise) CW** to **DECREASE** shortening temperature. For example: the **AVERAGE** temperature is 365° F (185°C) and the desired cook temperature is 340° F (171°C) — turn the adjusting screw ¼ **TURN** to the **RIGHT (CW)** to lower the cook temperature.

b) If the **AVERAGE** temperature computed above is **LOWER** than the desired cook temperature, the adjusting screw should be turned to the **LEFT (counter-clockwise) CCW** to **INCREASE** shortening temperature. For Example: the **AVERAGE** temperature is 347.5° F (175°C) and the desired cook temperature is 360° F (182°C) - turn the adjusting screw **1/8 TURN** to the **LEFT (CCW)** to raise the cook temperature.

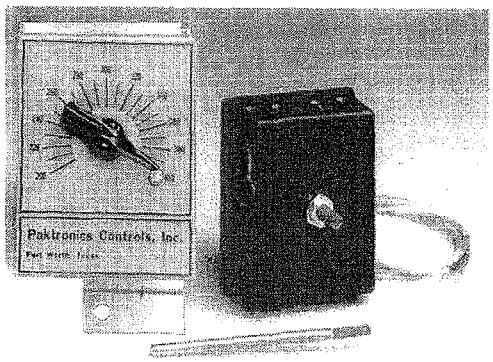


11) Repeat STEP 8) and 9) to re-compute the **AVERAGE** temperature and if it is within ± 7° F (± 4°C) of the desired cook temperature, no further adjustment is necessary.

NOTE: To **ACCURATELY** set the Fenwal Temperature Controller to the desired cook temperature, shortening **MUST BE** periodically **STIRRED** in a **COUNTER-CLOCKWISE** direction to assure it is evenly heated.

12) Repeat **STEP 1)** and **STEP 2)** and after the sensing element has **COOLED**; 1) remove the Bead type K temperature probe from the sensing element, 2) **CAREFULLY** replace and secure the **KNOB** on the adjustment shaft with the **POINTER** against the **LOW** setting **(MAXIMUM CLOCKWISE POSITION)** and 3) replace shortening to the shortening level mark.

D. Electronic Thermostat CALIBRATION - The Electronic Thermostat in all fryer configurations are equipped with a Dial and Knob and should be checked and calibrated when necessary as follows:



1. **ENSURE** electrical power and, if applicable, gas to the fryer has been turned **OFF.**

2. **CAREFULLY** drain sufficient shortening from the fryer to **LOWER** the shortening about 4" (102 mm) beneath the Electronic Thermostat sensing probe.

3. After the sensing probe has **COOLED,** loop the bead of an **ACCURATE** digital test thermometer temperature probe around the sensing element; then connect the probe to the thermometer.

4. Replace shortening drained in step B and **ENSURE** it is level with the shortening level mark on the rear of the vat; then turn the power and, if applicable, gas to the fryer **ON.**

5. Set the **KNOB** of the Electronic Thermostat to the **CENTER** (300) of the dial and periodically **STIR** the shortening in a **COUNTER-CLOCKWISE (CCW)** direction with a long handle skimmer to pull congealed shortening **UPWARD** from the Cold Zone area.

6. When shortening has reached the set temperature and the **RED** indicator lamp on the fryer has turned **OFF,** allow the Electronic Thermostat to cycle **ON** and **OFF** about five (5) times to stablize the system.

7. After the shortening temperature has stablized, record the temperature reading of the **TEST THERMOMETER** immediately after the **RED** indicator lamp and the fryer turns **OFF.**

8. **CAREFULLY** loosen the set screw on the Electronic Thermostat **KNOB** without turning the thermostat potentiometer, set the thermostat knob pointer to the temperature recorded by the test thermometer; then tighten the set screw on the thermostat knob taking care not to turn the thermostat's potentiometer.

9. Repeat steps 1 and 2 above, remove the test thermometer temperature probe from the Electronic Thermostat sensing element; then repeat step D to return the fryer to normal operation.

SERVICE AND PARTS

Technical Assistance and Parts Ordering Information

Technical Assistance

Model BE20-18/20 & B-E17-14

Contact an authorized service agent or the Customer Service Department, Ultrafryer Systems at **1.800.525.8130** for technical assistance.

Parts Ordering Information

Replacement Parts

To expedite requests and minimize downtime, please provide the following information when ordering replacement parts by phone, fax or mail:

- Your company name and phone number
- Your company purchase order number
- Bill-to address
- Ship-to address
- Part number and description of the desired item
- Quantity desired
- Your name or signature of authorized buyer

To order via Telephone:  (888) 331-5031	To order via Fax:  (210) 731-5099 Please indicate *"ATTN: Order Entry Department"* on the FAX cover sheet to ensure timely processing of your order.
To order via Mail:  Ultrafryer Systems ATTN: Order Entry Department PO Box 5369 San Antonio, TX 78201	To order via Email:  ultrafryerservice@ultrafryer.com

Terms

Net 30 days for customers on open accounts. Past due balances will be charged 1 1/2% per month (18% per annum) until full balance is paid.

Damages

Ultrafryer Systems is not responsible for damage occurring in transit. All deliveries must be inspected for damage to shipping containers prior to departure of the delivering carrier. Any damage must be notated on the receiving document to facilitate filing of freight claims. Carriers must be notified immediately and freight inspections must be requested from the carrier. Ultrafryer Systems can and will gladly assist you in preparing and processing of the necessary claims only if proper notification has been accomplished on the carrier delivery document. Damaged equipment and or containers must be available for the claims inspector to inspect.

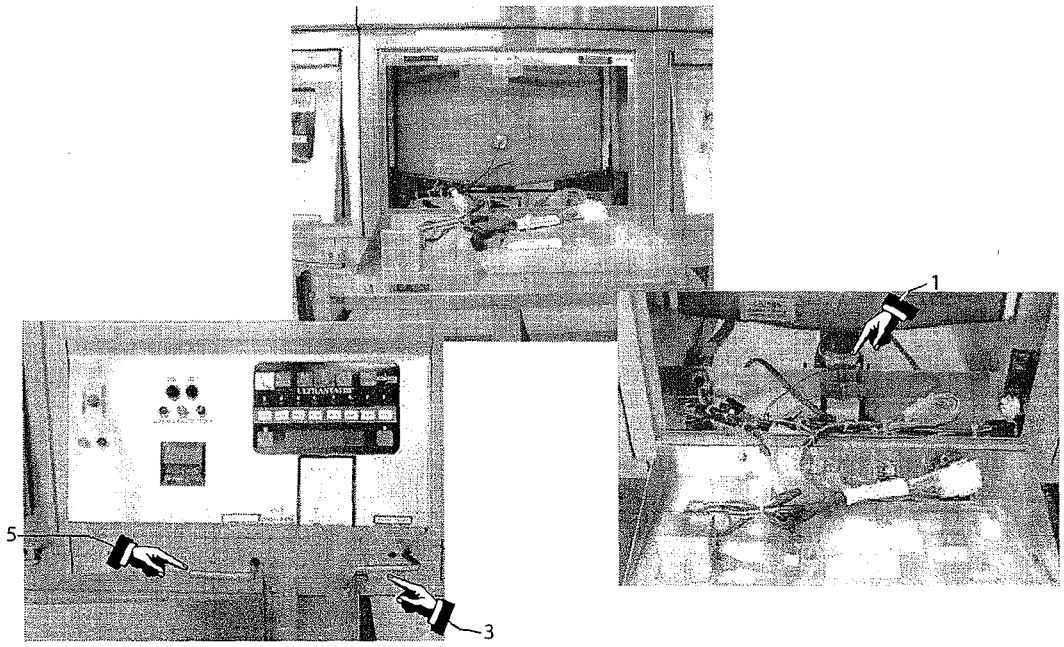
Returns

Ultrafryer Systems cannot guarantee credit for items returned without proper authorization. All returns must have prior Ultrafryer Systems Customer Service or Warranty department approval. An assigned number will be issued by the approval authority. Please print the assigned number on all returned packages and corresponding paperwork. Returned goods are subject to a l5% restocking charge. Ultrafryer Systems is not responsible for freight charges on returned goods unless authorized by Customer Service and or Warranty personnel. Ultrafryer Systems does not receive freight collect or C.O.D. shipments.

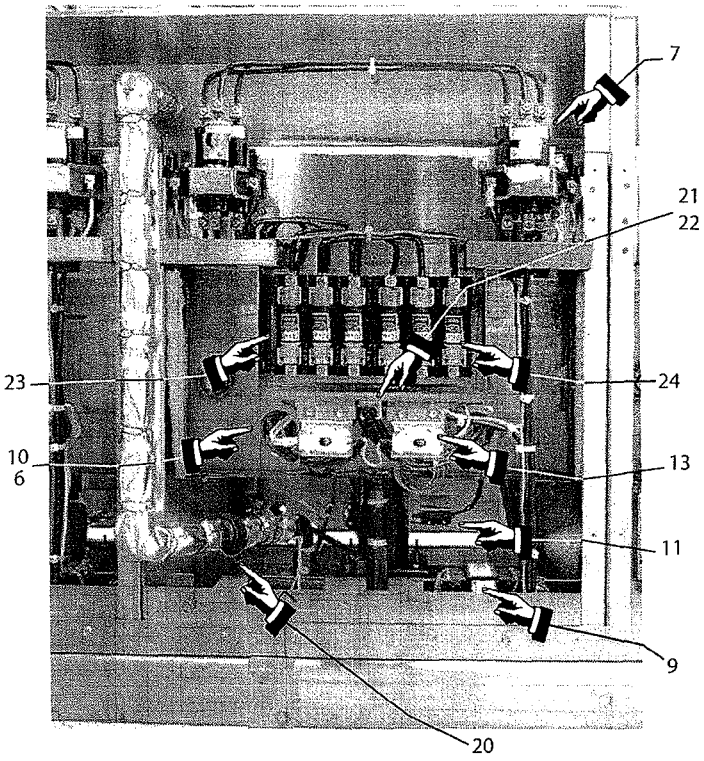
Parts Identification

Use the following sketches to find the part in question and its identifying part number. Use that part number when ordering a replacement part.

MODEL EUF FRONT FIEW
PANEL OPEN & PANEL CLOSED



MODEL EUF REAR VIEW



ITEM	DESCRIPTION	PN
1	2" (51mm) Drain Valve for EUF - 18/20" Electric Fryers (Uses Gasket PN 22A119). 1¼" (32mm) Drain Valve for EUF - 14" Electric Fryers (Uses Gasket PN 22A119).	12-775 12A483
* 2	Drain Clean-out Rod.	12-569
3	Filter Valve Lever for EUF-14" Electric Fryer. Filter Valve Lever for EUF-18" Electric Fryer. Filter Valve Lever for EUF-20" Electric Fryer.	12A476 12A477 12A477
5	Drain Ball Valve Lever for EUF-14 Electric Fryer. Drain Ball Valve Lever for EUF-18/20 Electric Fryer.	12A476 12A477
6	Heat Element Teflon Washer.	18-174
7	208/240 Volt 3 Ø 60 Ampere Mercury Contactor w/24 Volt Resistive Coil for all versions of Fryers	18-231
8	Fenwal Temperature Controller (Used with Default-to-Manual-Restart (DTMR) Control PN 12A265 **ONLY** with Model EU Fryers.) Electronic Thermostat (Used with Default-to-Manual-Restart (DTMR) Control PN 12B070 **ONLY** with Model EU Fryers.) Temperature Sensing Probe (Used with Ultrastat Cooking Computers)	18-233 12B077 18A006
9	Type K 120 to 24 Volt 100 KVA Square D Step Down Transformer for all versions of Fryers.	18A010
10	208 Volt, 3 Ø, 8.5 KW Heat Element for EUF-14 Electric Fryer. 208 Volt, 3 Ø. 10 KW Heat Element for EUF-18/20 Electric Fryer. 240 Volt, 3 Ø, 8.5 KW Heat Element for EUF-14 Electric Fryer 240 Volt, 3 Ø, 10 KW Heat Element for EUF-18/20 Electric Fryer.	18A012 18A013 18A014 18A015
11	Drain Valve Lever Microswitch mounting bracket for all EUF Electric Fryers.	19A104
*12	Heat Element Support Bracket for all EUF-18 Electric Fryer. Heat Element Support Bracket for all EUF-20 Electric Fryer. Heat Element Support Bracket for all EUF-14 Electric Fryer.	19A117 19A118 19A178
13	Hi-Limit Switch Pre-Set to trip at 450° F (232°C) for all EUF-18/20 Electric Fryers (NOTE1). Hi-Limit Switch Pre-Set to trip at 435° F (224°C) for all EUF-14 Electric Fryers (NOTE1).	19A145 19A193
*14	Hi-Limit Switch Probe Holder for all EUF Electric Fryers.	19A788
*15	Basket Hanger Bracket for all EUF-14 Electric Fryer. Basket Hanger Bracket for all EUF-18 Electric Fryer. Basket Hanger Bracket for all EUF-20 Electric Fryer.	19A949 19A950 19A951
*16	Hi-Voltage Terminal Block for all EUF Electric Fryers.	22-544
*17	19¼" x 19¼" (489 mm x 489 mm) Vat Grill with Deflector for EUF-20 Electric Fryer. 13¼" x 13¼" (337 mm x 337 mm) Vat Grill with Deflector for EUF-14 Electric Fryer. 17¼" x 17¼" (438 mm x 438 mm) Vat Grill with Deflector for EUF-18 Electric Fryer.	12A071 12A070 12A062
*18	Hexagon Neoprene Pump/Motor Bushing for all EUF Electric Fryers.	22-769
*19	Type SJO 16/3 Electric Cord with Molded Plug for all EUF Electric Fryers.	33-048
20	120 Volt 75 Watt Silicon Rubber Heater Tape 5' (1352 mm) for all EUF Electric Fryers.	23-341
21	Type AP-2 Fuse Holder Assembly for all EUF Electric Fryers.	23-373
22	Buss Type AGC-8 8 Ampere Fuse for all EUF Electric Fryers.	23-374
23	Class RK5 35 Ampere 250 Volt Time Delay Fuse for EUF-18/20 Electric Fryers.	23A043
24	250 Volt 60 Ampere 3 Pole Fuse Block for EUF-18/20 Electric Fryers.	23A044
*25	Filter System Ball Valve for all EUF Electric Fryers ½" (13mm)	24-036
*26	Model GPV-0519 7.7 GPM (29.26 LPM) Viking Pump/Motor for all EU 18" & 20" Fryers. **NOTE:** For replacement Baldor Motor & Bracket Kit order PN 12B129 and for Pump Only order PN 34-329. Model GPV-0514 5.5 GPM (19.25 LPM) Viking Pump/Motor for all EU14 Electric Fryers. **NOTE:** For replacement Baldor Motor & Bracket Kit order PN 12B129 and for Pump Only order 24-339.	24A183 24A184
*27	Medium Duty 4" (102mm) Front Caster w/Brake for all EUF Electric Fryers.	28-015
*28	Medium Duty 4" (102mm) Rear Caster w/o Brake for all EUF Electric Fryers.	28-016
*29	"L" Shaped Tip cleaning Brush for all EUF Electric Fryers.	29A044
*30	Nema 5-15R/L5-15R Dual Electrical Receptacle for all EUF Electric Fryer Banks.	33A005

* **NOT SHOWN**

NOTE: 1) Order a ¼" (6 mm) Compression Fitting PN 24-247 when ordering this item.

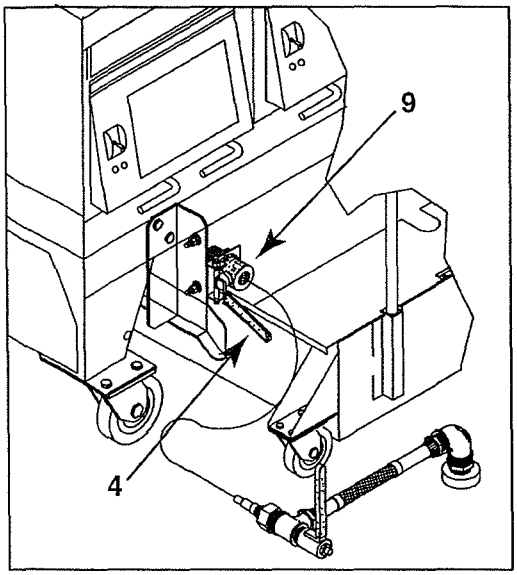
Model EUF Center Drain Replacement Vats:

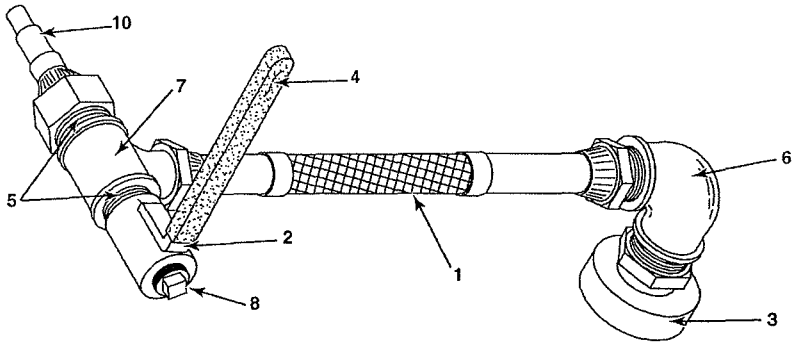
VAT SIZE	VAT DEPTH	PN
14" (356 mm)	Standard 6⅝" (168 mm)	12A715
18" (457 mm)	Standard 9" (229 mm)	12A747
20" (508 mm)	Standard 9⅜" (238 mm)	12A748

Model EUF Front Drain Replacement Vats:

VAT SIZE	VAT DEPTH	PN
14" (356 mm)	Shallow 7⅜" (187 mm)	12A749
18" (457 mm)	Standard 9³⁄₁₆" (223 mm)	12A750
20" (508 mm)	Standard 9³⁄₁₆" (223 mm)	12A751

BULKHEAD SUCTION COUPLING

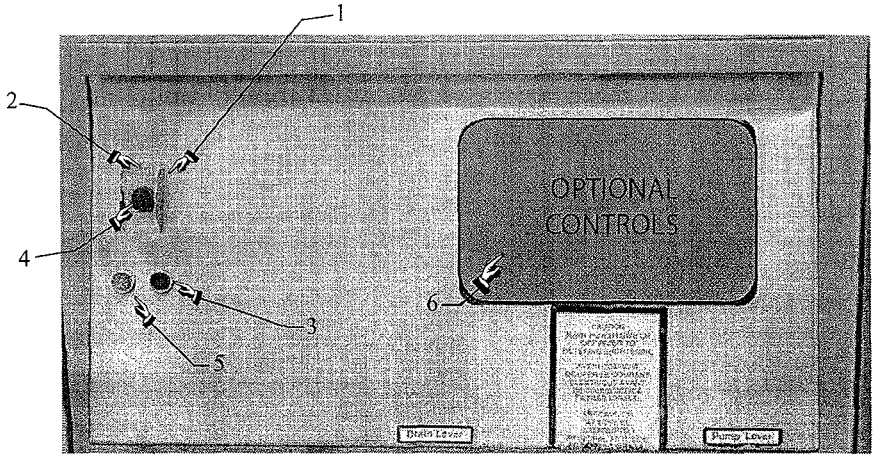




SUCTION HOSE ASSEMBLY
PN 12A912

ITEM	DESCRIPTION	PN
1	**NSF APPROVED** ½" (13 mm) x 10½" (267 mm) Long, Food Grade wire reinforced Hose w/Fittings for all EU Fryers	12A276
2	Suction Line Hose Handle Assembly	19A932
3	Female Quick-Connect Fitting	22-677
4	Cool Handle II Grip	22-734
5	½" (13 mm) Closed Black Iron Nipple	24-003
6	⅜" (10 mm) x 90° w/½" (13 mm) NPT Internal Threads Black Iron Street Elbow	24-376
7	½" x ½" x ½" (13 x 13 x 13 mm) Black Iron Tee	24A083
8	½" (13 mm) Black Iron Square Head Plug	24A084
9	½" (13 mm) FPT S/S Female Bulkhead Coupling w/raised Push Button Release	24A157
10	½" (13 mm) FPT x 2⅞" (73 mm) Long S/S In-Line Male Plug	24A160

MODEL EUF ELECTRIC FRYER
TEMPERATURE CONTROL ACCESS PANELS

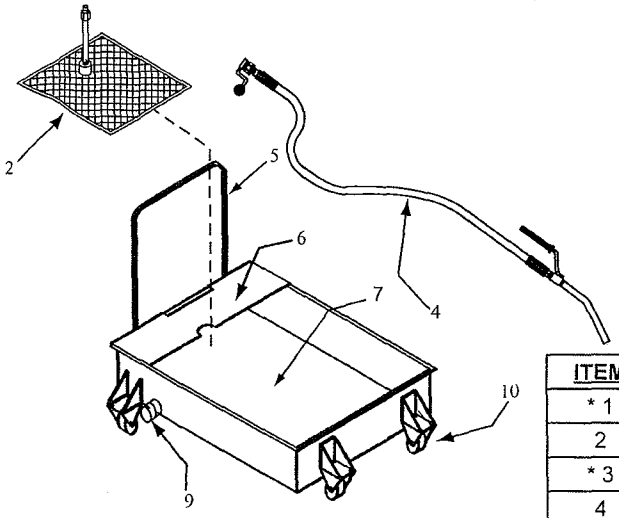


ITEM	DESCRIPTION	PN
1	On/Off Toggle Switch Guard.	18-129
2	120 Volt 6 Amp SPDT Toggle ON/OFF Switch.	18A287
3	125 Volt 1/3 Watt Snaplight w/**RED** Lens.	23-362
4	Toggle ON/OFF Switch Protective Boot.	23-402
5	125 Volt 1/3 Watt Snaplight w/**AMBER** Lens.	23A056
6	**COOKING CONTROLS** Default-To-Manual-Restart (DTMR) Control f/EUF Electric Fryer. Uses Fenwal Controller PN18-233	12A265
	OR Default-To-Manual-Restart (DTMR) Control f/EUF Electric Fryer. Uses Electronic Thermostat PN12B077.	12B070
	OR Ultrastat 11 Cooking Computer (Uses Temperature Probe 18A006)	22A120
	Ultrastat 21 Cooking Computer (Uses Temperature Probe 18A006)	Note
	Ultrastat 25 Cooking Computer (Uses Temperature Probe 18A006)	Note

NOTE: To obtain a replacement "**PROGRAMMED**" Ultrastat Cooking Computer contact the Customer Service Department at **1-800-525-8130** and provide the following information:

TYPE STORE: CHURCHS, POPEYES COMPANY, POPEYES FRANCHISE, ETC.
TYPE FRYER: ELECTRIC OR GAS
PRODUCT: CHICKEN, FRENCH FRIES, ETC.

MODEL EUF FILTER TUB ASSEMBLY

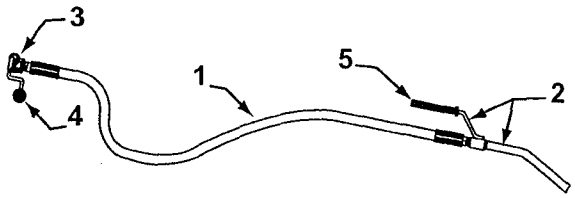


MODEL EUF "UNIVERSAL"
FILTER TUB ASSEMBLY
PN 11A783

ITEM	DESCRIPTION	PN
* 1	Filter tub Scraper	12-567
2	Micro-Mesh S/S Filter Assembly	12A807
* 3	Magnepad Paper Filter Assembly (Note)	12A813
4	Par-2-F/Par-3-F Wash Down Hose Assembly	12-330
5	Filter Tub Handle	19-423
6	Filter Tub Cover	19A481
7	Universal Filter Tub	19A801
8	1¼ " (32 mm) Boil-out Drain Ball Valve (Optional)	24A069
9	1¼ " (32 mm) Black Iron Pipe Cap	24A152
10	Medium Duty Caster	28A005

*** Item not shown**

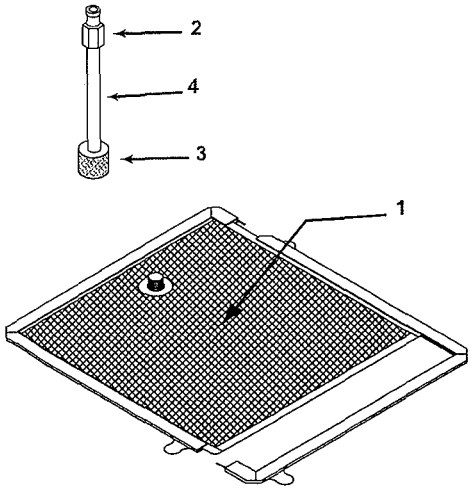
Note: Magnepad Paper Filter Assembly PN 12A813 can be provided with Filter Tub Assembly in lieu of Micro-Mesh Filter PN 12A807.



MODEL EUF
WASH DOWN HOSE ASSEMBLY
PN 12-330

ITEM	DESCRIPTION	PN
1	6 ft (1829mm) Wash Down Hose w/Fittings	12-541
2	Par-2-F/Par-3_F Wash Down Handle & Nozzle	12-675
3	Hose Quick Disconnect Assembly	19-248
4	Black Ball Knob	22-620
5	Cool II Handle	22-734

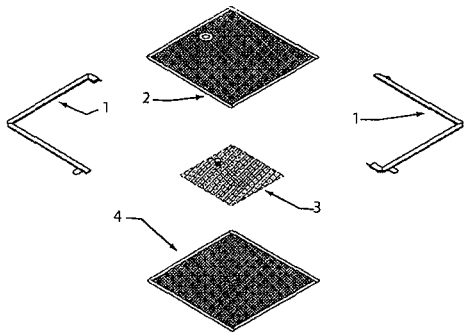
MICRO MESH FILTER SCREEN ASSEMBLY
PN 12A807



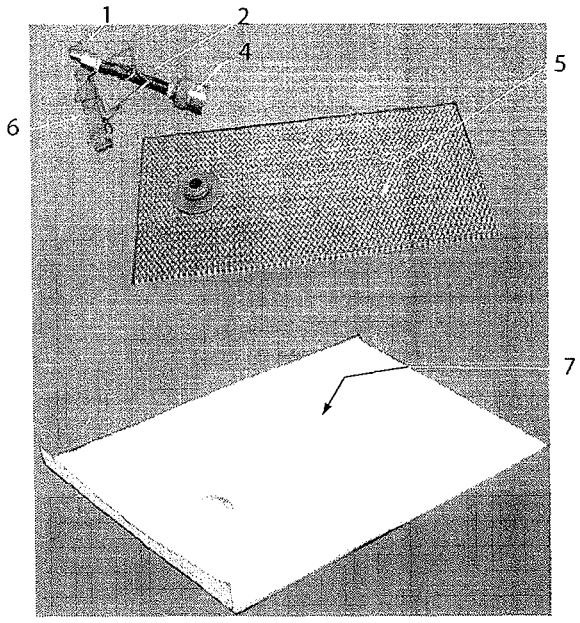
ITEM	DESCRIPTION	PN
1	Micro Mesh Filter Screen (see exploded view)	21A279
2	⅜" (10 mm) NPT Male Stem Quick Connect Fitting	22-676
3	Top Compression Cap (Knurl Knob)	24-369
4	⅜" (10 mm) x 7" (178 mm) S/S Nipple	24-471

NOTE: USED WITH FILTER TUB ASSEMBLY PN 11A783.

EXPLODED VIEW



ITEM	DESCRIPTION	PN
1	Filter Screen Frame Set	22A280
2	Upper Filter Screen	21A281
3	Baffle w/suction line fitting	21A282
4	Lower Filter Screen	21A274

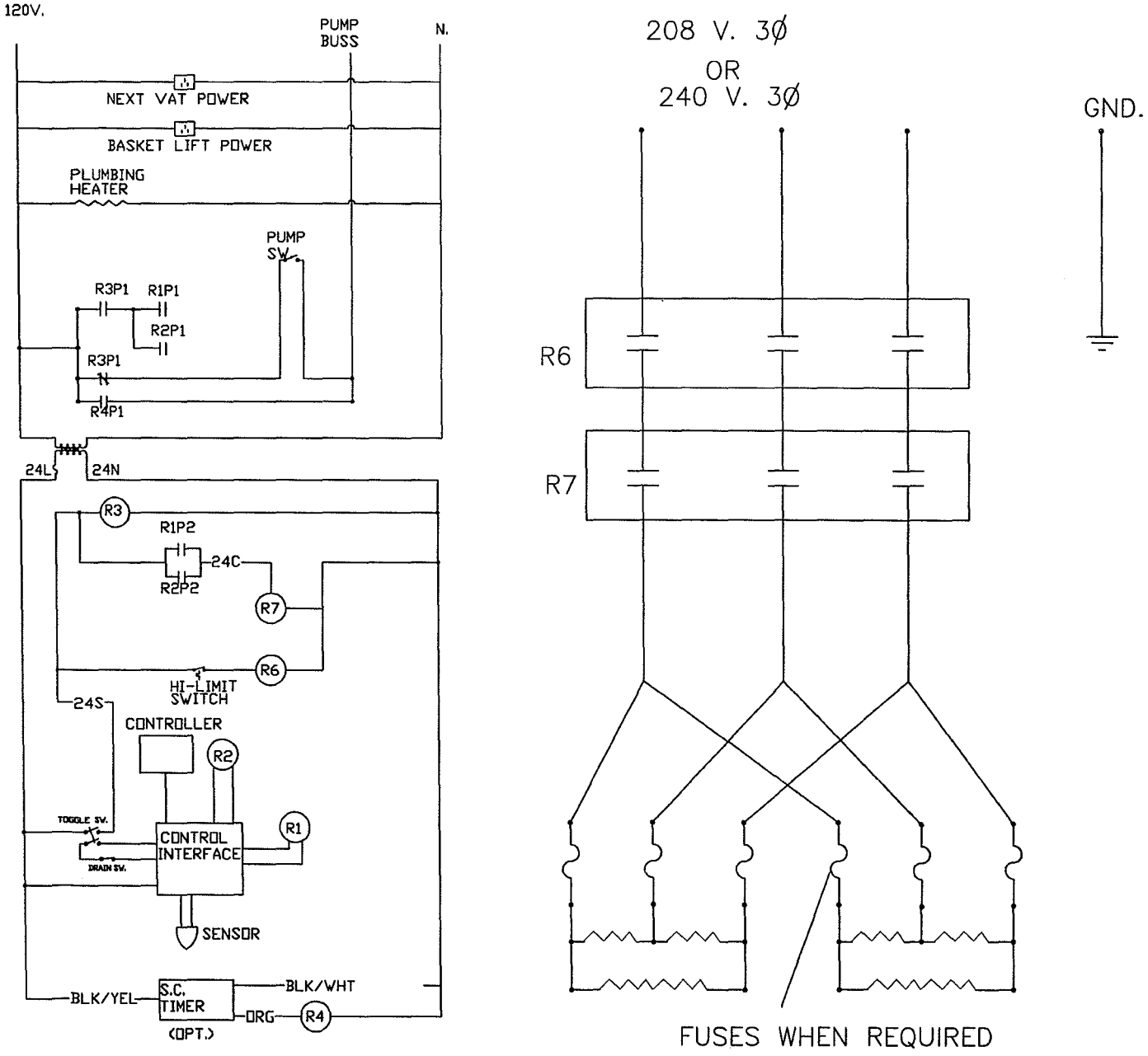


MAGNEPAD FILTER ASSEMBLY
PN 12A813

ITEM	DESCRIPTION	PN
1	⅜" (10mm) NPT Quick-Connect Male Stem Fitting	22-676
2	⅜" x 7" (10mm x 178mm) S/S Nipple	24-471
3	23" x 30½" (597 x 775mm) Baffle Kit consisting of items 4, 5, & 6.	29A055
4	Top Compression cap (Knurl Knob)	24A153
5	21½" x 29" (456 x 737mm) Baffle	29A049
6	23" (584mm) Long Standpipe Clip	29A051
7	23½" (597mm) x 30" (762mm) Filter Pad	29A047
*8	Case of 30 Filter Pads	29A053

* Not Shown

WIRING DIAGRAMS


120V.
PUMP BUSS
N.
NEXT VAT POWER
BASKET LIFT POWER
PLUMBING HEATER
PUMP SW.
R3P1
R1P1
R2P1
R3P1
R4P1
24L
24N
R3
R1P2
R2P2
24C
R7
R6
HI-LIMIT SWITCH
24S
CONTROLLER
R2
TOGGLE SW.
DRAIN SW.
CONTROL INTERFACE
R1
SENSOR
BLK/YEL
S.C. TIMER
(OPT.)
BLK/WHT
ORG
R4
208 V. 3Ø
OR
240 V. 3Ø
GND.
R6
R7
FUSES WHEN REQUIRED

30A162