KSCFH18E Cool Zone Series Electric Fryers

Installation & Operation Manual

PARTS LIST INCLUDED

Frymaster

NON-CE &

CE

CFESA Commercial Food Equipment Service Association

Frymaster, a member of the Commercial Food Equipment Service Association, recommends using CFESA Certified Technicians.

24-Hour Service Hotline
1-800-551-8633

8195678A

October 2011

Please read all sections of this manual and retain for future reference.

NOTICE

IF, DURING THE WARRANTY PERIOD, THE CUSTOMER USES A PART FOR THIS MANITOWOC FOOD SERVICE EQUIPMENT OTHER THAN AN UNMODIFIED NEW OR RECYCLED PART PURCHASED DIRECTLY FROM FRYMASTER DEAN, OR ANY OF ITS AUTHORIZED SERVICE CENTERS, AND/OR THE PART BEING USED IS MODIFIED FROM ITS ORIGINAL CONFIGURATION, THIS WARRANTY WILL BE VOID. FURTHER, FRYMASTER DEAN AND ITS AFFILIATES WILL NOT BE LIABLE FOR ANY CLAIMS, DAMAGES OR EXPENSES INCURRED BY THE CUSTOMER WHICH ARISE DIRECTLY OR INDIRECTLY, IN WHOLE OR IN PART, DUE TO THE INSTALLATION OF ANY MODIFIED PART AND/OR PART RECEIVED FROM AN UNAUTHORIZED SERVICE CENTER.

NOTICE

This appliance is intended for professional use only and is to be operated by qualified personnel only. A Frymaster Dean Factory Authorized Servicer (FAS) or other qualified professional should perform installation, maintenance, and repairs. Installation, maintenance, or repairs by unqualified personnel may void the manufacturer's warranty. See Chapter 1 of this manual for definitions of qualified personnel.

NOTICE

All fryers shipped without factory supplied cords and plug assemblies must be hardwired using flexible conduit to the terminal block located on the rear of the fryer. These fryers should be wired to NEC specifications. Hardwired units must include installation of restraint devices.

NOTICE

This equipment must be installed in accordance with the appropriate national and local codes of the country and/or region in which the appliance is installed.

NOTICE

Drawings and photos used in this manual are intended to illustrate operational, cleaning and technical procedures and may not conform to onsite management operational procedures.

NOTICE TO OWNERS OF UNITS EQUIPPED WITH COMPUTERS

U.S.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) This device may not cause harmful interference, and 2) This device must accept any interference received, including interference that may cause undesired operation. While this device is a verified Class A device, it has been shown to meet Class B limits.

CANADA

This digital apparatus does not exceed the Class A or B limits for radio noise emissions as set out by the ICES-003 standard of the Canadian Department of Communications.

Cet appareil numerique n'emet pas de bruits radioelectriques depassany les limites de classe A et B prescrites dans la norme NMB-003 edictee par le Ministre des Communications du Canada.

⚠ DANGER

The front ledge of the fryer is not a step. Do not stand on the fryer. Serious injury can result from slips or contact with the hot oil.

DANGER

Improper installation, adjustment, maintenance or service, and unauthorized alterations or modifications can cause property damage, injury, or death. Read the installation, operating and service instructions thoroughly before installing or servicing this equipment. See Chapter 1 of this manual for definition of qualified service personnel.

DANGER

Single fryers equipped with legs must be stabilized by installing anchor straps. All fryers equipped with casters must be stabilized by installing restraining chains

DANGER

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

DANGER

The crumb tray in fryers equipped with a filter system must be emptied into a fireproof container at the end of frying operations each day. Some food particles can spontaneously combust if left soaking in certain shortening material. Additional information can be obtained in the filtration manual included with the system.

WARNING

No structural material on the fryer should be altered or removed to accommodate placement of the fryer under a hood. Questions? Call the Frymaster Dean Service Hotline at 1-800-551-8633.

WARNING

Do not bang fry baskets or other utensils on the fryer's joiner strip. The strip is present to seal the joint between the frypot. Banging fry baskets on the strip to dislodge shortening will distort the strip, adversely affecting its fit. It is designed for a tight fit and should only be removed for cleaning.

DANGER

Adequate means must be provided to limit the movement of this appliance without depending on or transmitting stress to the electrical conduit. A restraint kit is provided with the fryer. If the restraint kit is missing contact your local Frymaster Factory Authorized Servicer (FAS) for part number 826-0900.

DANGER

This fryer may have two power cords and prior to movement, testing, maintenance and any repair on your Frymaster fryer; disconnect BOTH electrical power cords from the electrical power supply.

KSCFH18E Cool Zone Series Electric Fryers

INSTALLATION & OPERATION MANUAL

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KSCFH18E COOL ZONE SERIES ELECTRIC FRYERS
CHAPTER 1: INTRODUCTION

1.1 Ordering Parts

Customers may order parts directly from their local Authorized Parts Distributor. For this address and phone number, contact your Maintenance & Repair Center or call the factory. The factory address and phone numbers are on the cover of this manual.

To speed up your order, the following information is required:

Model Number	_____	Type	_____
Serial Number	_____	With/Without Filter	_____
Optional Equipment	_____		
Item Part Number	_____	Quantity Needed	_____

1.2 Service Information

Call the 1-800-551-8633 or (318) 865-1711 Service Hotline number for the location of your nearest Maintenance & Repair Center. Always give the model and serial numbers of your filter and fryer. Also, identify which cooking computer or controller is installed on your fryer.

To assist you more efficiently, the following information will be needed:

Model Number	_____	Type	_____
Serial Number	_____		
With/Without Filter	_____	Computer/Controller	_____
Optional Equipment	_____		
Nature of Problem	_____		
	_____		

Additional information (i.e. cooking environment, time of day, and other pertinent information) may be helpful in solving your service problem.

1.3 Safety Information

Before attempting to operate your unit, read the instructions in this manual thoroughly.

Throughout this manual, you will find notations enclosed in double-bordered boxes similar to the ones below.

⚠ CAUTION

CAUTION boxes contain information about actions or conditions that ***may cause or result in a malfunction of your system*.**

⚠ WARNING

WARNING boxes contain information about actions or conditions that ***may cause or result in damage to your system***, and which may cause your system to malfunction.

⚠ DANGER

DANGER boxes contain information about actions or conditions that ***may cause or result in injury to personnel***, and which may cause damage to your system and/or cause your system to malfunction.

1.4 Computer Information

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. While this device is a verified Class A device, it has been shown to meet the Class B limits. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of the equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

If necessary, the user should consult the dealer or an experienced radio and television technician for additional suggestions.

The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

1.5 Service Personnel

1.5.1 Definitions

A. Qualified and/or Authorized Operating Personnel

1. Qualified/authorized operating personnel are those who have carefully read the information in this manual and have familiarized themselves with the equipment functions, or have had previous experience with the operation of equipment covered in this manual.

B. Qualified Installation Personnel

1. Qualified/authorized personnel are those who have carefully read the information in this manual and have familiarized themselves with the equipment functions, or who have had previous experience with the operation of the equipment covered in this manual.

C. Qualified Service Personnel

Qualified service personnel are those who are familiar with Frymaster/Dean equipment and have been authorized by Frymaster/Dean to perform service on Frymaster/Dean equipment. All authorized service personnel are required to be equipped with a complete set of service parts manuals and stock a minimum amount of parts for Frymaster/Dean equipment. A list of Frymaster Factory Authorized Servicers (FAS's) is located on the Frymaster website at www.frymaster.com.

1. ***Failure to use qualified service personnel will void the Frymaster/Dean warranty on your equipment.***

KSCFH18E COOL ZONE SERIES ELECTRIC FRYERS
CHAPTER 2: IMPORTANT INFORMATION

2.1 General

Proper installation is essential for the safe, efficient, trouble-free operation of this appliance. Any unauthorized alteration of this equipment will void the Frymaster warranty.

NOTICE
If this equipment is wired directly into the electrical power supply, a means for disconnection from the supply having a contact separation of at least 3-mm in all poles must be incorporated in the fixed wiring.

NOTICE
This equipment must be positioned so that the plug is accessible unless other means for disconnection from the power supply (e.g., a circuit breaker) is provided.

NOTICE
If this appliance is permanently connected to fixed wiring, it must be connected by means of copper wires having a temperature rating of not less than 75°C (167°F).

NOTICE
If the electrical power supply cord is damaged it must be replaced by a Frymaster/Dean Factory Authorized Service Center technician or a similarly qualified person in order to avoid a hazard.

⚠ DANGER
This appliance MUST be connected to a power supply having the same voltage and phase as specified on the rating plate located on the inside of the fryer door.

⚠ DANGER
All wiring connections for this appliance MUST be made in accordance with the wiring diagrams furnished with the fryer. Refer to the wiring diagram(s) affixed to the inside of the fryer door when installing or servicing this equipment.

2.1 General (cont.)

⚠ DANGER
Frymaster appliances equipped with legs are for stationary installations. Appliances fitted with legs must be lifted during movement to avoid damage to the appliance and bodily injury. For movable installations, optional equipment casters must be used. Questions? Call 1-800-551-8633.

⚠ WARNING
Do not attach accessories to this fryer unless fryer is secured from tipping. Personal injury may result.

⚠ WARNING
No structural material on the fryer should be altered or removed to accommodate placement of the fryer under a hood. Questions? Call the Frymaster/Dean Service Hotline at 1-800-551-8633.

All installation and service on Frymaster equipment must be performed by qualified, certified, licensed, and/or authorized installation or service personnel.

Service may be obtained by contacting your local Factory Authorized Servicer.

The KSCFH18E Electric Cool Zone Fryers are energy-efficient, electrically heated units, certified by Underwriters Laboratory and manufactured to their basic performance and application specifications. The KSCFH18E is certified for installation and operation in the European Community (CE).

All units are shipped completely assembled with accessories packed inside the frypots. All units are adjusted, tested and inspected at the factory before shipment.

⚠ WARNING
The on-site supervisor is responsible for ensuring that operators are made aware of the inherent dangers of operating a hot oil fryer/filter system, particularly the aspects of fryer operation, oil filtration, and draining/cleaning procedures.

2.2 Rating Plate

Information on this plate includes the model and serial numbers, as well as electrical requirements. When communicating with the factory about a unit or requesting special parts or information, this data is essential for proper identification.

2.3 Pre-Installation

a. GENERAL: All installation and service on this equipment must be performed by qualified, certified, licensed, and/or authorized installation or service personnel. A list of Frymaster Authorized Servicer's is located on the Frymaster website at www.frymaster.com .

If you do not have access to this list, please contact the Frymaster/Dean Technical Services department using the phone number listed on the front of this manual.

NOTE: **Failure to use qualified service personnel will void the Frymaster warranty.**

b. STANDARDS: All electrical cooking appliances must be electrically connected and grounded in accordance with local codes, or in the absence of local codes, with the latest editions of:

1. **United States of America**:

   National Electric Code Standards ANSI/ NFPA #70.

   American National Standards Institute
   1430 Broadway
   New York, NY 10018

   NFPA Standards #96 and #211.

   National Fire Protection Association
   470 Atlantic Avenue
   Boston, MA 02110

2. **Canada**: Canadian Electrical Code Part 1, CSA-C22.1.

   Canadian Standards Association
   178 Rexdale Boulevard
   Rexdale, ONT
   M9W 1R3

3. **European Community (CE)**: All electrical cooking equipment must be electrically connected and grounded in accordance with local codes, or in the absence of local codes, with the latest editions of the appropriate national or European Community (CE) standards.

2.4 Unpacking the Fryer/Component Systems

Ensure the container is upright. Unpack the fryer carefully and remove all accessories from the carton. Do not discard or misplace these, as they will be needed.

After unpacking, immediately check the equipment for visible signs of shipping damage. If such damage has occurred, contact the carrier and file the appropriate freight claims. Do not contact the factory, as the responsibility of shipping damage is between the carrier and the dealer or end-user.

2.4 Unpacking the Fryer/Component Systems (cont.)

If your equipment arrives damaged:

a. File claim for damages immediately – Regardless of extent of damage.

b. Visible loss or damage – Be sure this is noted on the freight bill or express receipt and is signed by the person making the delivery.

c. Concealed loss or damage – If damage is unnoticed until equipment is unpacked, notify freight company or carrier immediately, and file a concealed damage claim. This should be done within fifteen (15) days of date of delivery. Retain the shipping container for inspection.

NOTE: Frymaster does not assume responsibility for damage or loss incurred in transit.

If your equipment arrives without casters or legs installed, leave the equipment on the pallet and do not cut the banding straps until ready to install casters or legs.

2.5 Conversion of Units

Heat Input:

1 kW = 3410 BTU/hr

100 BTU/hr = 0.0293 kW

Temperature:

0° Celsius = 32° Fahrenheit

Temperature in degrees Celsius = (Temperature in degrees Fahrenheit (F)-32) X 0.555

Example: 100° Celsius = (212°F-32) x 0.555

KSCFH18E COOL ZONE SERIES ELECTRIC FRYERS
CHAPTER 3: INSTALLATION INSTRUCTIONS

3.1 Installing the Fryer

A. Initial Installation: If installed with legs, do not push against any unit edges to adjust its position. Use a pallet or lift jack to lift it slightly and place it where it is to be installed.

B. Relocating the Fryer: If relocating a fryer installed with legs, remove all weight from each leg before moving.

Note: If a leg becomes damaged during movement, contact a factory authorized servicer for immediate repair/replacement of the damaged leg.

⚠ DANGER

This fryer may tip and cause personal injury if not secured correctly in a stationary position. Drain all oil/shortening from fryer before moving. Hot oil will splash and cause severe burns upon contact.

3.2 Leg and Caster Installation

A. **General**

1. Install legs (front) and rigid casters (rear) near where the fryer is to be used, as neither are secure for long transit. The KSCFH18E electric fryer cannot be curb mounted and must be equipped with the legs and rigid casters provided.

2. When positioning the fryer, gently lower the fryer into position to prevent undue strain on the legs and internal mounting hardware. Use a pallet or lift jack to lift and position the fryer if possible. Tilting the fryer may damage the legs.

3. The rigid casters must be installed on the fryer rear only.

4. Proceed to Step 3.3, Leveling the Fryer, after legs and rear rigid casters are installed to ensure the fryer is level before using.

B. **Leg and Rigid Caster Installation**

1. Remove unit from pallet.

2. Carefully raise unit with forklift, pallet jack, or other steady means.

3. Place one lock washer on each hex head screw.

3.2 Leg and Caster Installation (cont.)

4. Insert hex head screws with lock washers [1/4-20 threads by ¾" (19 mm) long] through bolt holes of leg mounting plates and mount to the front channel. Mount rigid casters to the rear channel following the same procedure. A locknut has been attached to the topside of the base mounting plates at the factory to capture the hex head screw as it is screwed in.

5. Tighten the bolts to 5.65 joules (50 inch-lbs.) minimum torque.

⚠ CAUTION
For caster retrofit, the unit must be at room temperature and drained of shortening before installing the casters.

3.3 Leveling the Fryer

⚠ DANGER
Adequate means must be provided to limit the movement of this appliance without depending on or transmitting stress to the electrical conduit. A restraint kit is provided with the fryer. If the restraint kit is missing contact your local Frymaster Factory Authorized Servicer (FAS) for part number 826-0900.

A. Place a carpenter's spirit level across the top of the fryer and level the unit front-to-back. If the fryer is off level side to side, a platform or other surface adjustment is needed; there is no side to side level adjustments on a fryer equipped with caster/leg combinations (If a fryer is equipped with legs only, side to side level adjustments can be made. If a fryer is equipped with casters only, no level adjustments to the fryer can be made.). If the fryer is not level, the unit may not function efficiently, the oil may not drain properly for filtering and in a multi-fryer battery, it may not match adjacent units.

Legs (Only)

1. Adjust leg height with an adjustable or 1-1/16" (27-mm) open-end wrench by turning the hex bullet on the bottom of the leg.

2. The hex bullet is for minor leg height adjustment only. Do not adjust more than 1" (22-mm).

3. When leveling the unit, the leg body should be held firmly to keep the leg from bending or rotating while turning the hex bullet foot to the required height.

Rigid Casters (Only)

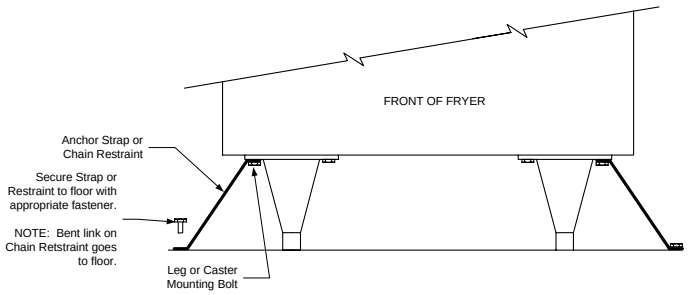
1. Install the rigid casters on the rear of the fryer only. Legs must be installed on the front of the fryer.

2. There are no level-adjustments for the rigid casters.

B. If the floor is uneven or has a decided slope, it is recommended to place the fryer on a level platform.

C. If the fryer is moved, re-level the fryer following the instructions given in Steps 3.3.A-B.

D. When the fryer is leveled in its final position, install the restraints provided with the unit to limit its movement so that it does not depend on or transmit stress to the electrical conduit or connection. Install the restraints in accordance with the provided instructions (see illustration below). If the restraints are disconnected for service or other reasons, they must be reconnected before the fryer is used.



NOTE: The installation must be inspected after it is complete to ensure it meets the intent of these instructions. The on-site supervisor and/or operator(s) should be informed that the appliance is installed with restraints. If restraints are removed to move fryer (cleaning beneath and behind, relocation, etc.), ensure that they are re-installed when fryer is returned to its permanently installed position.

3.4 Electrical Connections

⚠ WARNING

The fryer MUST be connected to the voltage and phase as specified on the rating and serial number plate located on the back of the fryer door.

A ground wire MUST be connected to the ground terminal provided near the input power terminal block.

Plan and implement installation in accordance with local codes. Service connections should be made at the power input terminal block, located through the back lower portion of the fryer and through the component box, located under the control wireway. It is recommended that this connection be made by means of an approved (local code compliant), flexible-metallic or rubber-covered electrical cable and a quick-disconnect plug. If rigid or flexible-metal conduit connections

are required, they must be made through the rear portion of the fryer cabinet, to the fryer input terminal block.

A. **Wiring Diagram**: It is attached to the inside of the fryer door. Amperage for each unit depends on the type of installation and accessories supplied with the unit. Consult the rating plate (inside door) for required amperage.

3.5 Power Requirements

Each fryer should have its cord for the element supply on an individual circuit as well as the control cord.

⚠ DANGER
Copper wire suitable for at least 167°F (75°C) MUST be used for power connections.

MODEL	VOLTAGE	PHASE	WIRE SERVICE	MIN. SIZE AWG	(mm^2)	AMPS PER LEG		
						L1	L2	L3
KSCFH18E	208	3	3	6	(16)	50	50	50
KSCFH18E	240	3	3	6	(16)	43	43	43

⚠ DANGER
The electrical power supply for this appliance MUST be the same as indicated on the rating plate located on the inside of the fryer door.

⚠ DANGER
All wiring connections for this appliance MUST be made in accordance with the wiring diagrams furnished with the equipment. Wiring diagrams are located on the inside of the fryer door.

3.6 Operating Switches

A. **Fryer with KFC-1 Computer**

This fryer/filter system is equipped with a drain valve safety switch and a frypot float-switch on each of the two-batteried fryers. Drain-valve safety switches de-energize the fryer heating elements during the filter process, thus providing an additional safety feature. Always leave the computer on when filtering.

The KFC-1 computer monitors filter operations. The computer logs the number of times the fryer has been filtered, and will lock out when a preset number is reached. The drain valve must

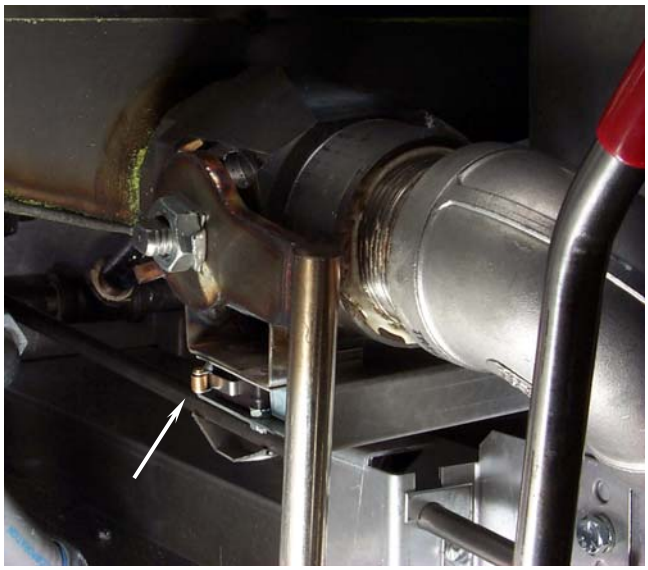
be opened and closed, and the frypot refilled with oil/shortening before the KFC-1 computer will allow a cook cycle (after filtering).

See the KFC-1 Computer User's Manual for detailed information.

B. **Other Fryer/Filter Switches**

1. Fryer Power Switch (Computer): The fryer's power is turned on and off with the computer. See computer manual for more detail.

2. Drain Valve Microswitch: The computer will display Drain Open when the drain valve is opened. The computer will lockout and prevent any cooking operation until the "EXIT/COOL FILTER" button is pressed.



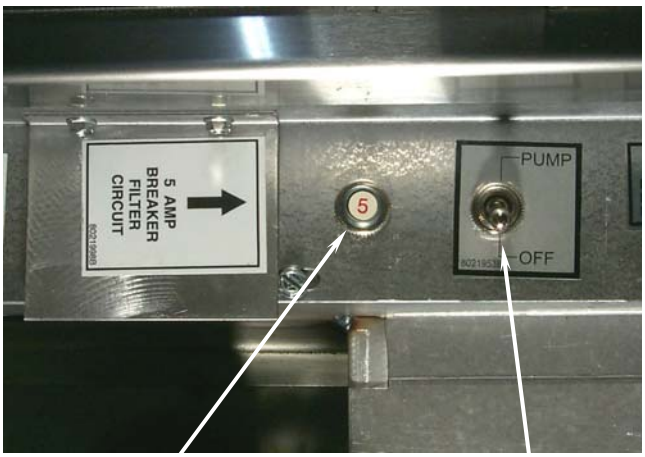
Drain valve microswitch location.

3. Float Safety Switch: Located in the frypot. Designed as a safety switch, it prevents the computer from calling for heat until the oil level rises above the heating elements.

Float safety switch location.

4. Filter Pump Reset: Located under the left control panel of the fryer battery. This switch resets the UFF filter pump motor.

5. Manual Filter Override Switch: Located under the left fryer control panel of the fryer battery. This toggle switch allows the operator to manually operate the UFF filter if a problem develops with the auto functions.



Filter pump reset switch Manual filter override switch

3.7 Drain and Oil-Return Handles

1. Drain Valve Handle (Red). Pull to open. The drain valve handle should be closed at all times except when draining and/or filtering the fryer.

2. Oil Return Valve Handle (Yellow). Pull the oil return valve handle to open the oil return valve for the frypot being filtered. The filter pump activates when this handle is pulled. Pull the yellow handle only when filtering. Pushing the yellow handle in closes the oil return valve and deactivates the pump motor.

Drain valve handle. Oil return valve handle.

⚠ WARNING
If the filter pump safety switch repeatedly trips, do not continue to reset. A potential safety hazard exists. Contact an authorized service technician for troubleshooting.

3.8 Initial Cleaning Before Startup

New units are wiped clean with solvents at the factory to remove any visible signs of dirt, oil, grease, etc., remaining from the manufacturing process, then coated lightly with oil. Wash thoroughly with hot, soapy water to remove any film residue and dust or debris before food preparation, then rinse out and wipe dry. Wash also any accessories shipped with the unit. Close the drain-valve completely and remove the crumb screen. Make sure the screws holding the temperature probe onto the heating elements are tight.

⚠ WARNING
All droplets of water must be removed from the frypot before filling with shortening. Failure to do so will cause splattering of hot shortening and could cause injury to the operator.

3.9 Final Preparation

A. The KSCFH18E frypot shortening capacity is approximately 90 pounds (40.5Kg).

B. Ensure fryer power switches are "OFF".

C. Ensure the tilt heating-elements are in the "down" position.

D. Liquid shortening (cooking oil): Fill the fryer to the lower OIL LEVEL line on the back of the frypot. Replace the basket support screen.

⚠ WARNING
Never operate fryer without enough cooking compound or water in the frypot to cover the heating elements.

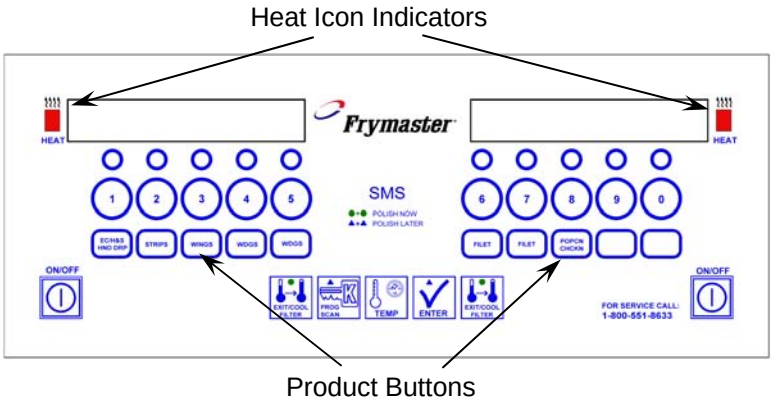
⚠ DANGER
NEVER set a complete block of solid shortening on top of heating elements. To do so will damage the elements and increase the potential for flash-point shortening temperatures and subsequent fire.

E. Solid shortening: Either pre-melt solid shortening on another appliance first or cut into small pieces and pack tightly into the cool zone (bottom) of the frypot (with the heating elements in the "up" position and OFF). Lower the heating elements and continue to pack the shortening, taking care not to disturb the temperature probe (on heating elements) or the high-limit (mounted in frypot). Ensure the float switch is in the "up" position prior to packing solid shortening.

3.9 Final Preparation (cont.)

Note: If the float switch is blocked in "down position" with solid shortening, the fryer will not operate. Always ensure that the float switch is in the "up" position prior to packing solid shortening into frypot.

F. KFC-1 Cooking Computer: Turn computer on (this turns the fryer on also). The computer will run the fryer through the melt cycle to melt the shortening. As the fryer heating elements cycle on and off to melt the shortening, the heat icons located on either side of the KFC-1 product buttons will cycle on and off. The computer will display "LOW" until the shortening reaches 255°F (124°C).



At 255°F (124°C), the computer will display actual temperature until setpoint temperature has been reached. When the fryer comes out of melt cycle, the fryer will go into continuous heat mode until the setpoint temperature is reached. When the computer calls for heat, heat icons will light while the heating elements are energized. At setpoint temperature, the computer will display "DROP".

G. After shortening reaches the setpoint temperature, let the heating elements cycle at least four times, then insert a good thermometer or pyrometer near the temperature sensing probe approximately 3 inches (7.6 cm) into the shortening. When the heating elements just cycle ON after the fourth time, the thermometer should read within ±5°F (±2°C) of the computer temperature setting.

H. When the frypot is filled and the shortening melted, replace the basket support-screen over the heating elements.

⚠ DANGER

Always wear oil-proof, insulated gloves when working with the fryer filled with HOT SHORTENING.

Always drain HOT SHORTENING into a metal container. HOT SHORTENING can melt plastic buckets and crack glass containers.

4.1 Opening

1. At opening time, always visually check that the computer is "OFF".

4.2 General Use

1. For consistent quality product, convenience and long-term savings, use a high-quality liquid shortening.

2. If using solid shortening, never melt a block of shortening by setting it whole in the fryer vessel.

3. Although 350°F (177°C) is the recommended temperature for most cooking operations, set the fryer at the lowest possible temperature which produces a high quality end product while ensuring maximum life for your shortening.

4.3 Start-up Procedures

1. If fryer is empty, pour enough liquid shortening into the frypot to fill to the bottom OIL LEVEL line scribed on the rear wall. If solid shortening is to be used, melt the shortening following procedures in Section 3.8, Final Preparation.

2. KFC-1 Cooking Computer: Turn the computer "ON" and select cooking program as described in the KFC-1 Cooking Computer User's manual.

4.4 Filtering

1. The KFC-1 Computer must remain ON during filter operations to function properly.

2. Filter the shortening at least once daily or more frequently if cooking is heavy. This assures the longest life possible for the shortening, a better taste to the food being prepared and minimizes flavors being transferred from batch to batch.

4.4 Filtering (cont.)

1. If using solid shortening, clear return lines before turning off the filter motor by allowing the pump to run for approximately 10-15 seconds once air bubbles appear in the frypot from the oil return line. Failure to do so will allow solid shortening to cool, solidify and clog the lines.

See Chapter 6 for detailed filtration procedures.

4.5 Closing

1. When closing at night, filter shortening in all fryers and drain the filter lines. Cover the open tanks of oil. Turn the computer "OFF".

4.6 Shutdown

1. When shutting down for periods longer than overnight, drain shortening and clean the frypot thoroughly. Either discard the shortening or return it filtered to the frypot and then cover it. Turn the computer "OFF".

KSCFH18E COOL ZONE SERIES ELECTRIC FRYERS
CHAPTER 5: PREVENTATIVE MAINTENANCE

5.1 General

Well-maintained equipment operates more efficiently and lasts longer. Keep the fryer clean during the working day and thoroughly clean at the end of each day.

5.2 Daily

Wash all removable parts. Clean all exterior surfaces of the body. Do not use cleansers, steel wool, or any other abrasive material on stainless steel. Filter the oil/shortening and replace if necessary. Filter oil/shortening more often under heavy use conditions (i.e. heavily breaded products).

⚠ WARNING

Water MUST NOT be allowed to drain into the filter pan or filter system. Irreversible damage will result if water is allowed into the system, and all applicable warranties will be voided.

5.3 Weekly

Completely drain the frypot into either the filter or a steel container. Do not use a plastic bucket or glass container.

Clean the frypot with a good grade of cleaner or hot water and a strong detergent.

Close the drain valve and refill with either the cleaning solution or water and detergent.

Scrub frypot walls and heating elements. Drain frypot and rinse in clear water.

Once cleaning is completed, drain, rinse, and dry thoroughly.

Refill with shortening as directed in Section 3.8 of this manual.

⚠ DANGER

All droplets of water must be removed from the frypot before filling with shortening. Failure to do so will cause splattering of hot shortening and could cause injury to the operator.

5.4 Periodic/Annual

Frymaster recommends that the fryer be inspected annually by a Factory Authorized Servicer for the following checks and adjustments:

- Inspect the cabinet inside and out, front and rear for excessive oil build-up and/or oil migration.
- Verify that the heating element wires are in good condition and that leads have no visible fraying or insulation damage and that they are free of oil migration build-up.
- Verify that heating elements are in good condition with no carbon/caramelized oil build-up. Inspect the elements for signs of extensive dry-firing.
- Verify that the tilt mechanism is working properly when lifting and lowering elements, and that the element wires are not binding and/or chafing.
- Verify the heating-element amp-draw is within the allowed range as indicated on the appliance's rating plate.
- Verify that the temperature and high-limit probes are properly connected, tightened and functioning properly, and that mounting hardware and probe guard are present and properly installed.
- Verify that component box and contactor box components (i.e. computer/controller, relays, interface boards, transformers, contactors, etc.) are in good condition and free from oil migration build-up and other debris.
- Verify that component box and contactor box wiring connections are tight and that wiring is in good condition.
- Verify that all safety features (i.e. contactor shields, drain safety switches, reset switches, etc.) are present and functioning properly.
- Verify that the frypot/cookpot is in good condition and free of leaks and that the frypot/cookpot insulation is in serviceable condition.
- Verify that all wiring harnesses and connections are tight and in good condition.

Built-in Filtration:

- Inspect all oil-return and drain lines for leaks and verify that all connections are tight.
- Inspect the filter pan for leaks and cleanliness. If there is a large accumulation of crumbs in the crumb basket, advise the owner/operator that the crumb basket should be emptied into a fireproof container and cleaned daily.
- Verify that all O-rings and seals (including those on the Power Shower and on quick-disconnect fittings) are present and in good condition. Replace o-rings and seals if worn or damaged.

5.4 Periodic/ Annual (cont.)

- Check filtration system integrity as follows:

  – With the filter pan empty, place each oil return handle, one at a time, in the ON position. Verify that the pump activates and that bubbles appear in the cooking oil/shortening (or that gurgling is heard from the Power Shower port) of the associated frypot.

  – Close all oil return valves (i.e., place all oil return handles in the OFF position). Verify proper functioning of each oil return valve by activating the filter pump using the lever on one of the oil return handle microswitches. No air bubbles should be visible in any frypot (or no gurgling should be heard from the Power Shower ports).

  – Verify that the filter pan is properly prepared for filtering, then drain a frypot of oil heated to 350°F (177°C) into the filter pan and close the frypot drain valve. Place the oil return handle in the ON position. Allow all cooking oil/shortening to return to the frypot (indicated by bubbles in the cooking oil/shortening or, on units with Power Showers, cessation of oil flow from the Power Shower). Return the oil return handle to the OFF position. The frypot should refill in no more than 2 minutes and 30 seconds.

To ensure good fryer health and a safe environment, the fryer should be checked and adjusted periodically by qualified service personnel as part of a <u>regular kitchen maintenance program</u>.

5.5 Stainless Steel

All stainless steel fryer outer parts should be wiped regularly with hot, soapy water during the day and with a liquid cleaner designed for this material at the end of each day.

<u>Do not use</u> steel wool, abrasive cloths, cleansers or powders!

<u>Do not use</u> a metal knife, spatula or any other metal tool to scrape stainless steel! Scratches are almost impossible to remove.

If it is necessary to scrape the stainless steel to remove any encrusted materials, soak the area first to loosen the material, then use a wood or nylon scraper only.

KSCFH18E COOL ZONE SERIES ELECTRIC FRYERS
CHAPTER 6: UNDER FRYER FILTER (UFF) FILTRATION

6.1 General

⚠ WARNING

The on-site supervisor is responsible for ensuring that operators are made aware of the inherent hazards of operating a hot oil filtering system, particularly the aspects of oil filtration, draining and cleaning procedures.

The KSCFH18E is equipped with the Under Fryer Filter system (UFF). The shortening should be filtered at least daily or even more frequently if cooking is heavy. This ensures the longest life possible for the shortening, gives better taste to the food being prepared, and minimizes flavors being transferred from batch to batch.

To conduct filter operations with the KFC-1 Cooking Computer installed on the fryer, ALWAYS leave the computer ON when filtering. The computer must sense the drain valves opening and closing in order to allow fryer operation.

For consistent product quality, convenience and long-term savings, use a high-quality liquid shortening or vegetable oil.

If using solid shortening, always ensure the return lines are clear before turning off the filter pump. Hang any flexible lines up to drain, as solid shortening will solidify as it cools and clog the lines.

6.2 Filter Preparation

Assemble tools to be used for filtering. These are supplied with the filter starter kit:

- Frypot Brush - used to clean frypot sides, heating elements, and to dislodge sediment during filtration or shortening/oil change.
- Clean-Out Rod - used to dislodge heavy debris in the drain tube (when needed).
- Filter Powder.
- Filter Paper.

The following tools are not required, but are recommended to make the filtering task easier.

- Measuring Cup - used to measure filter powder.
- Stainless Steel Crumb Scoop – for removing large debris from shortening/oil prior to filtering.

Note: Always wear oil-resistant, insulated gloves and/or protective gear when working with hot oil.

6.2 Filter Preparation (cont.)

1. Put on protective gear/gloves. Pull the filter pan out from filter cabinet. Remove covers.

Pull the filter pan from the fryer and remove covers.

2. Place drip pan under male filter pan connection.

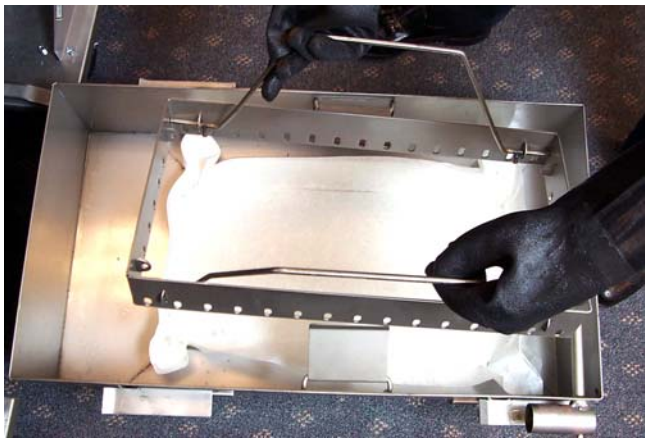
Proper drip pan placement.

3. Remove the crumb screen. Wash the screen in hot, soapy water, rinse, then dry thoroughly.

Remove crumb screen. If crumbs are present in the crumb screen, empty the screen into a fireproof container. Wash the screen in hot, soapy water, rinse, then dry thoroughly.

6.2 Filter Preparation (cont.)

4. Unlatch and remove the hold-down ring.



Removing hold-down ring.

5. Remove and discard old filter paper sheet from the filter pan.

Remove and discard old filter paper.

6. Remove the filter screen from the bottom of the pan.

Remove filter screen from filter pan.

6.2 Filter Preparation (cont.)

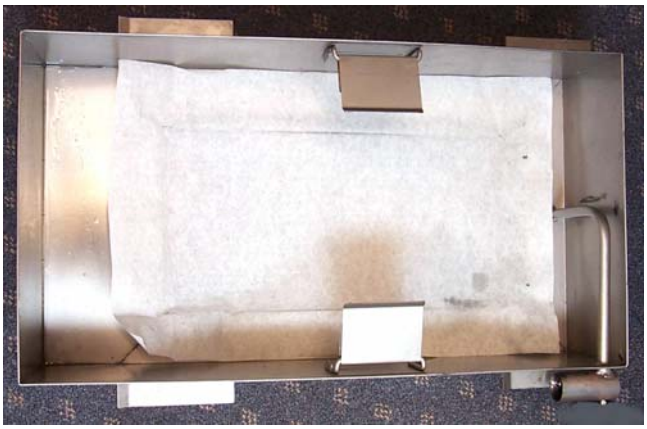
7. Thoroughly clean pan and all pan components as described for the crumb screen (Step 3).

Clean filter pan and all pan components. Ensure all parts are thoroughly dried before reassembly.

8. Inspect pickup tube and ensure vent hole is open and free of shortening/debris.

Vent hole location on pickup tube.

9. Replace filter screen, then place one sheet of filter paper in the bottom of the filter pan. **The filter screen must be installed prior to filter paper placement, or the filter won't operate correctly.**



Proper filter paper placement.

6.2 Filter Preparation (cont.)

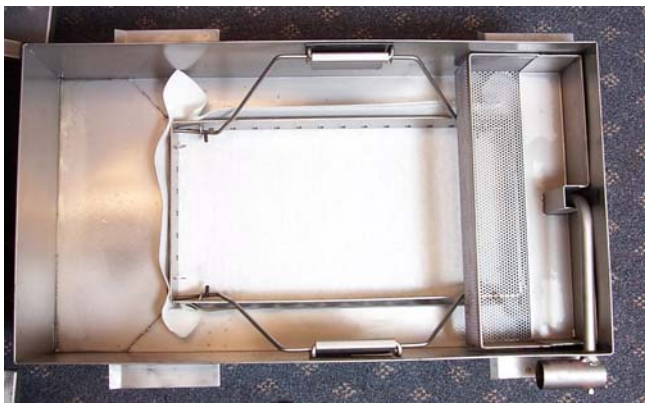
10. Reinstall and latch the hold down ring into position. Ensure filter paper is properly aligned under hold-down ring.

Locking latches on hold-down ring.

11. Sprinkle 1-cup/packet (8 ounces/227 grams) evenly over the paper.

Use a measuring cup or scoop to evenly distribute filter powder over the filter sheet.

12. Replace the crumb screen. Ensure crumb screen is kept clean throughout the workday.



Properly assembled filter pan, ready for use.

6.2 Filter Preparation (cont.)

13. Return pan covers to the filter pan.

Pan covers properly placed.

14. Return filter pan to fryer cabinet, ensuring that the two drainpipe extensions are directly over opening in filter pan cover.

Pushing filter pan back into cabinet. Filter is ready for operation.

6.3 UFF Filter Operations

⚠ DANGER

Draining and filtering of cooking oil or shortening must be accomplished with care to avoid the possibility of a serious burn caused by careless handling. The oil to be filtered is at or near 350°F (177°C). Ensure all hoses are connected properly and drain handles are in their proper position before operating any switches or valves. Wear all appropriate safety equipment when draining and filtering cooking oil or shortening.

⚠ DANGER

NEVER attempt to drain cooking oil or shortening from the fryer with the elements energized! Doing so will cause irreparable damage to the elements and may cause a flash fire. Doing so will also void the Frymaster warranty.

⚠ WARNING

Drawings and photos used in this manual are intended to illustrate operational, cleaning and technical procedures and may not conform to on-site management operational procedures.

⚠ DANGER

The crumb tray in fryers equipped with a filter system must be emptied into a fireproof container at the end of frying operations each day. Some food particles can spontaneously combust if left soaking in certain shortening material.

⚠ DANGER

Do not drain more than one frypot at a time into the built-in filtration unit to avoid overflow and spillage of hot oil/shortening.

⚠ DANGER

When draining oil/shortening into a disposal unit or portable filter unit, do not fill above the maximum fill line located on the container.

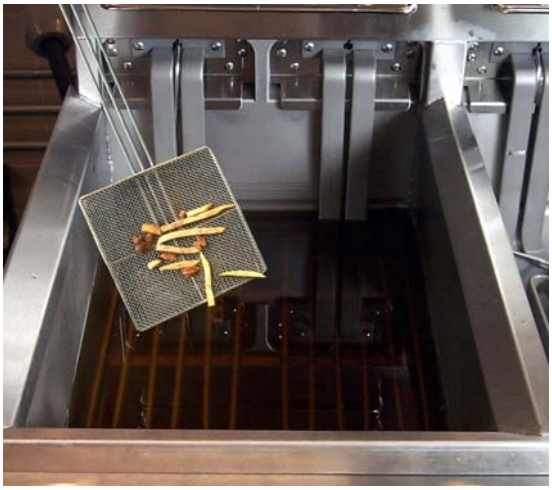
6.3.1 General Overview

The filter pump is turned on only after the shortening/oil is brought to operating temperature and drained into the prepared filter pan. The filter motor is then engaged and oil is drawn through filter paper and pumped back into the frypot. The frypot's drain remains open during the filtering process. Allow the oil to cycle through the filter paper (use KFC approved filtering procedure). At the end of the prescribed filtering period, close the drain valve and allow the pump to fill the frypot to the top OIL LEVEL line. Leave the pump running for 10-15 seconds after bubbles appear in the frypot to ensure all shortening/oil is pumped from the drain pan and the lines.

6.3.2 Filter Operation

1. Ensure the filter pan assembly is prepared as described in **Section 6.2- Filter Preparation**. Leave the computer ON before, during, and after the filtering process (use KFC approved filtering procedure).

2. Remove fry baskets from frypot. Prior to filtering, skim any large debris from the shortening/oil. Use extreme caution, as shortening/oil is at or near operating temperature [~350°F (~177°C)].



Prior to filtering, skim any large debris from oil in frypot.

3. After ensuring the filter pan is correctly positioned under the drain tubes, pull the red handle to drain the frypot into the filter pan. Drain ONLY one frypot at a time. The filter pan is designed to hold the contents of one frypot only.

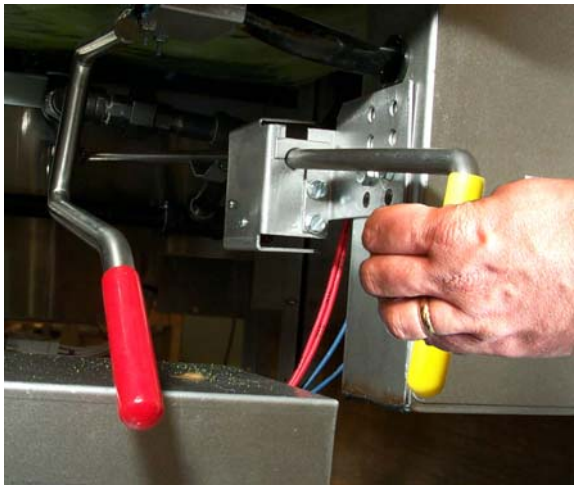
⚠ DANGER
NEVER attempt to clear a clogged drain valve from the front of the valve! Hot oil or shortening will rush out creating the potential for severe burns.

DO NOT hammer on the drain valve with the clean-out rod or other objects. Damage to the ball inside will result in leaks and will void the Frymaster warranty.

Pull the red handle to open the drain valve.

6.3.2 Filter Operation (cont.)

4. After all oil/shortening has drained from the frypot into the filter pan, pull the yellow handle to open the oil return lines and activate the filter pump.



Pull the yellow handle to open the oil return valve and activate the filter pump.

5. Oil will begin to pump from the filter pan into the frypot. Allow the oil to circulate for a prescribed time period (use KFC approved filtering procedure) to remove suspended particles (process known as "polishing"). If the frypot sides and bottom have sediment deposits, lift the heating elements and clean the frypot with the cleaning brush included with the fryer.

Allow the shortening/oil to circulate the prescribed time period to ensure all sediment and suspended particles are removed.

6. At the end of the filter cycle, close the drain valve (push the red handle until it stops) and allow the fryer to refill (see this section, Step #3 for additional reference). The heating elements will energize when the float safety switch rises to a safe level with the oil.

Frypot refilling with filtered shortening/oil.

6.3.2 Filter Operation (cont.)

7. After all oil is pumped back into the frypot, bubbles will form, indicating air in the oil return lines. Allow the oil to bubble for 10-15 seconds to ensure all shortening/oil is evacuated from the return lines. Push the yellow handle to close the oil return valve and deactivate the filter pump (see this section, Step #4 for additional reference).

Allow the shortening/oil to bubble for 10-15 seconds to ensure evacuation of all shortening/oil in the return lines.

8. Allow the oil to come to operating temperature. If the oil level is low, add oil until the level is at the top OIL LEVEL line. Remember, the oil is at operating temperature.

Add oil/shortening until the oil level is at the top OIL LEVEL line. DO NOT OVERFILL THE FRYPOT.

9. Do not allow crumbs to accumulate in the crumb tray. The crumb tray MUST be emptied into a fireproof container at the end of frying operations EACH day.

Empty contents of the crumb screen into a fireproof container immediately after filtering is complete.

KSCFH18E COOL ZONE SERIES ELECTRIC FRYERS
CHAPTER 7: TROUBLESHOOTING

7.1 Introduction

This section provides an easy reference guide to some of the common problems that may occur during the operation of this equipment. The troubleshooting guides that follow are intended to help correct, or at least accurately diagnose, problems with this equipment. Although the chapter covers the most common problems reported, you may encounter problems that are not covered. In such instances, the Frymaster/Dean Technical Service staff will make every effort to help you identify and resolve the problem.

When troubleshooting a problem, always use a process of elimination starting with the simplest solution and working through to the most complex. Never overlook the obvious – anyone can forget to plug in a cord or fail to close a valve completely. Most importantly, always try to establish a clear idea of why a problem has occurred. Part of any corrective action involves taking steps to ensure that it doesn't happen again. If a controller malfunctions because of a poor connection, check all other connections, too. If a fuse continues to blow, find out why. Always keep in mind that the failure of a small component may often be indicative of potential failure or incorrect functioning of a more important component or system.

Before calling a service agent or the Frymaster/Dean HOTLINE (1-800-551-8633):

- **Verify that electrical cords are plugged in and that circuit breakers are on.**
- **Verify that frypot drain valves are fully closed.**
- **Verify that frypot float safety switch is not stuck in the "down" position.**

⚠ DANGER

Hot cooking oil/shortening will cause severe burns. Never attempt to move this appliance when filled with hot cooking oil/shortening or to transfer hot cooking oil/shortening from one container to another.

⚠ DANGER

The equipment should be unplugged when servicing, except when electrical circuit tests are required. Use extreme care when performing such tests.

This appliance may have more than one electrical power supply connection point. Disconnect all power cords before servicing.

Inspection, testing, and repair of electrical equipment should be performed only by qualified service personnel.

7.2 Fryer Troubleshooting

<table>
<tr><td>7.2.1</td><td>Computer fails to turn "ON" when ON/OFF button is pressed.</td><td>1. Check wall circuit breakers. Reset if necessary.

2. Check fryer connection to external power source.</td></tr>
<tr><td colspan="2"> 

20 amp fuses located in the upper-left fryer cabinet interior of each fryer.</td><td>3. Disconnect fryer from power supply.

4. Check 20 amp fuses and replace if necessary (see photo at left).

5. Power surge/outage may have temporarily locked out computer.

6. Reconnect power to fryer. Press computer ON/OFF button "ON".

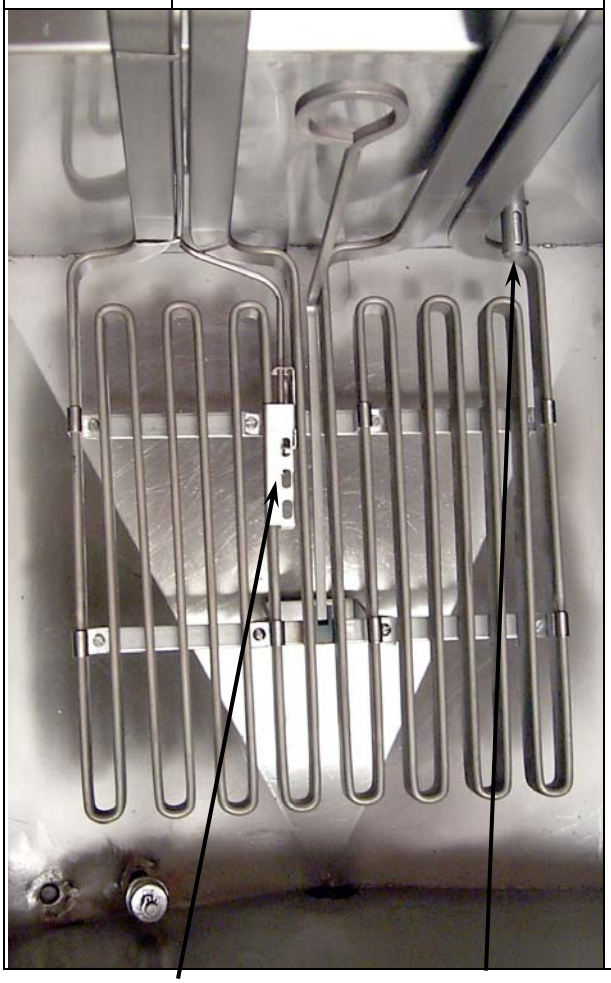
7. If computer fails to come "ON", contact an authorized service agent for service.</td></tr>
</table>

7.2 Fryer Troubleshooting (cont.)

7.2.2	**Actual frypot temperature differs from computer setpoint temperature.**	1. Turn fryer "ON". 2. Select a product number and allow the fryer to heat for approximately 30 minutes to stabilize shortening temperature. 3. Place a thermometer within 1-inch (2.5-cm) of the temperature probe mounted on the heating elements. 4. Press the computer temperature button to check frypot temperature. Press the computer temperature button twice to view setpoint temperature for the product number chosen. 5. The thermometer temperature should be within ±10°F (±5°C) of the computer display temperature. If the results are: **Yes**- System is maintaining temperature properly. **No**- The computer probe circuit may be faulty.

7.2 Fryer Troubleshooting (cont.)

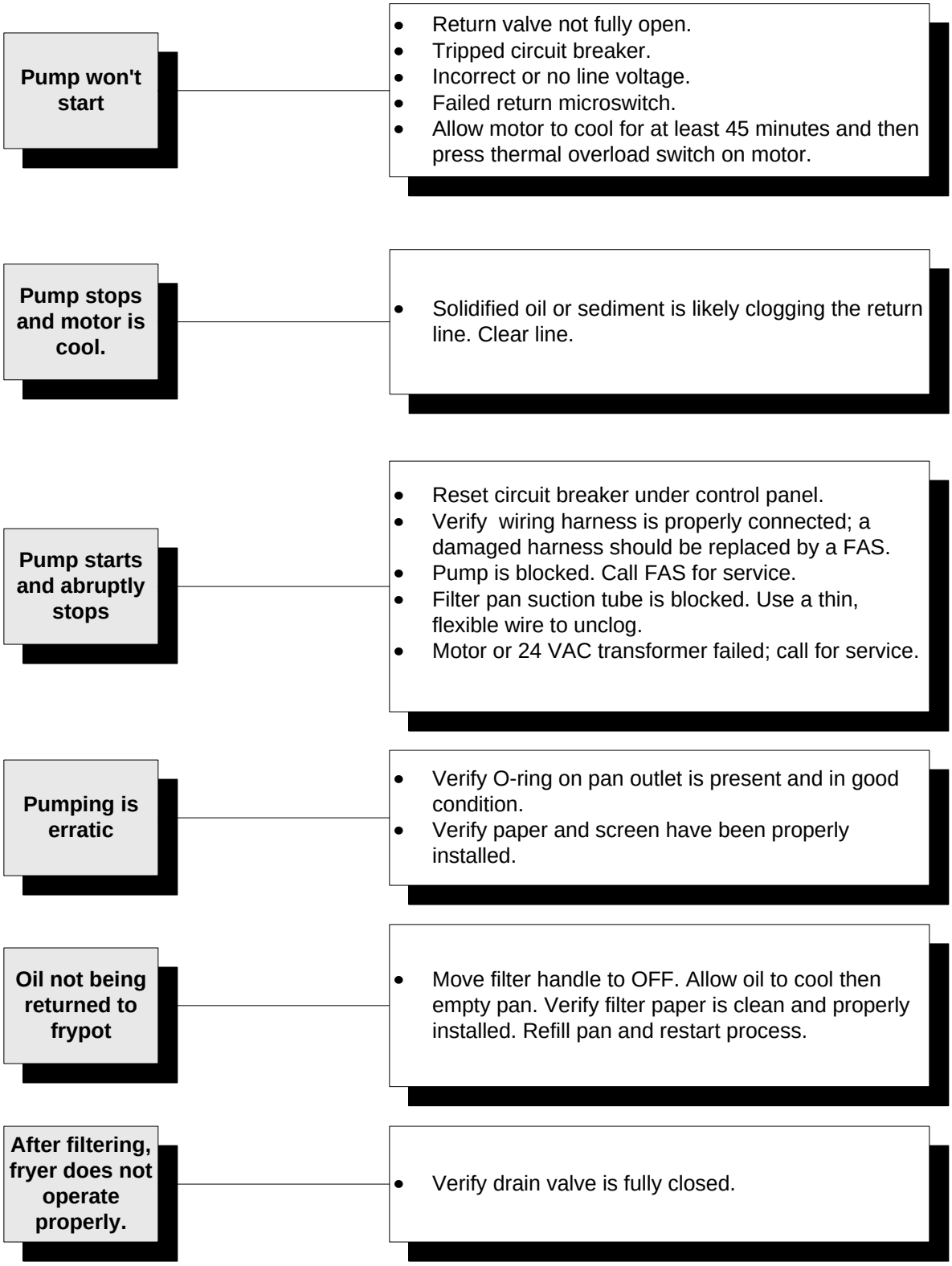
7.2.2 (cont.)	**Actual frypot temperature differs from computer setpoint temperature.**	6. Contact your authorized Frymaster service agent if any of the following occurs during this test: a. Computer probe circuit is suspect. b. During test, computer fails to call for heat. c. Actual frypot temperature is more than ±10°F (±5°C) of desired setpoint or computer probe-measured actual temperature. d. Computer measured actual temperature differs from setpoint temperature by more than ±10°F (±5°C) after shortening has stabilized per step #2.



7.2 Fryer Troubleshooting (cont.)

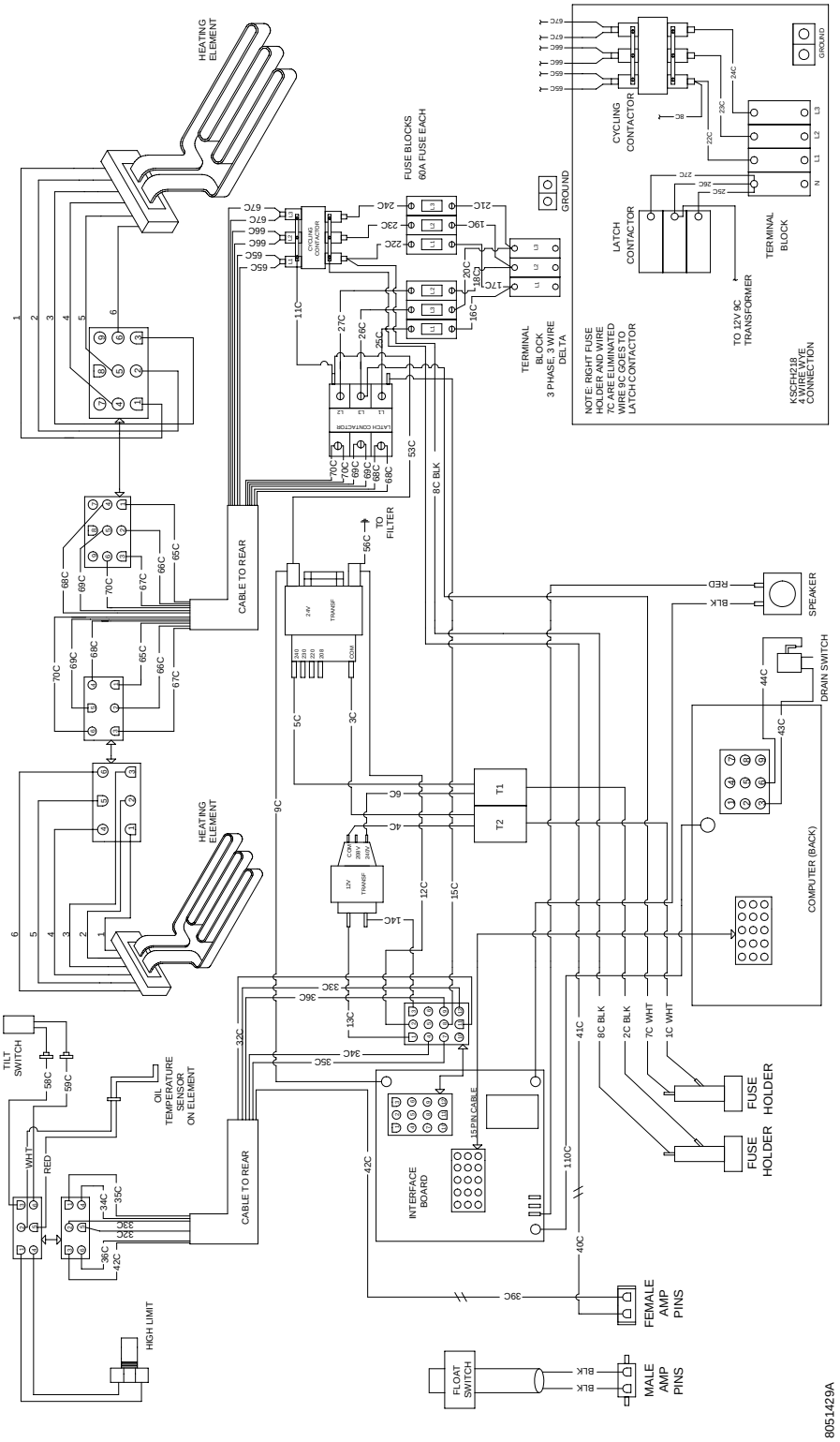
7.2.3	**Computer is ON, but the heating elements fail to heat.**	1. Ensure float safety switch is not stuck in "down" position. Replace float safety switch if defective. 2. If computer displays HELP, check high-limit thermostat (located on right back frypot side). Replace if defective.
7.2.4	DRAIN OPEN **message remains after closing drain valve.**	1. Computer was turned OFF while draining frypot. 2. Close drain valve. Turn computer OFF and then ON. Computer display will read ON. 3. Open drain valve for at least 30 seconds. Computer display will read DRAIN OPEN. 4. Close drain valve. Computer display will read FILL. 5. Fill frypot with shortening. Press EXIT/COOL FILTER when ready to cook. 6. If computer message DRAIN OPEN remains after steps 1-4, contact authorized Frymaster service agent. a. Drain microswitch may be faulty. b. Drain circuit may be suspect. c. Computer may be suspect.

7.3 Filtration System Troubleshooting

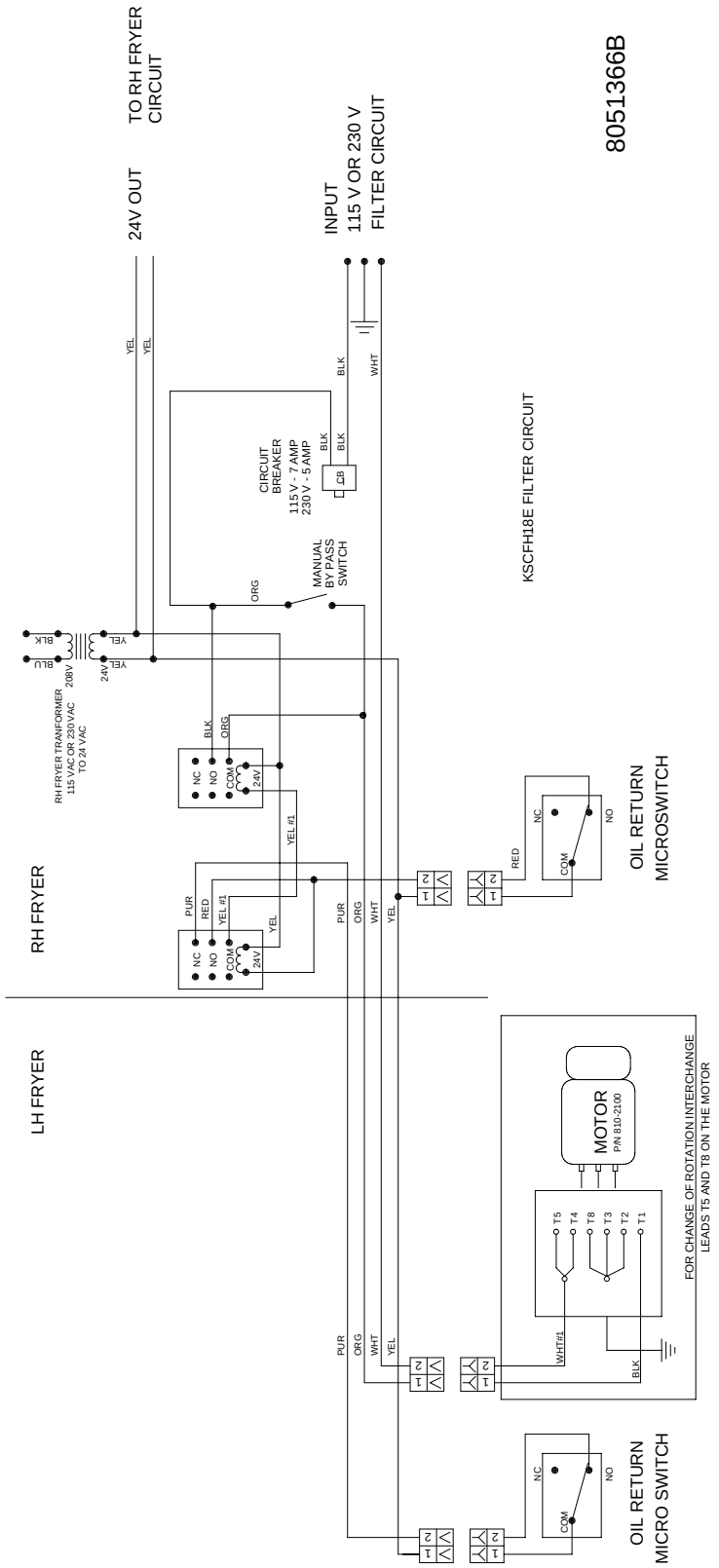


7.4 Wiring Diagrams

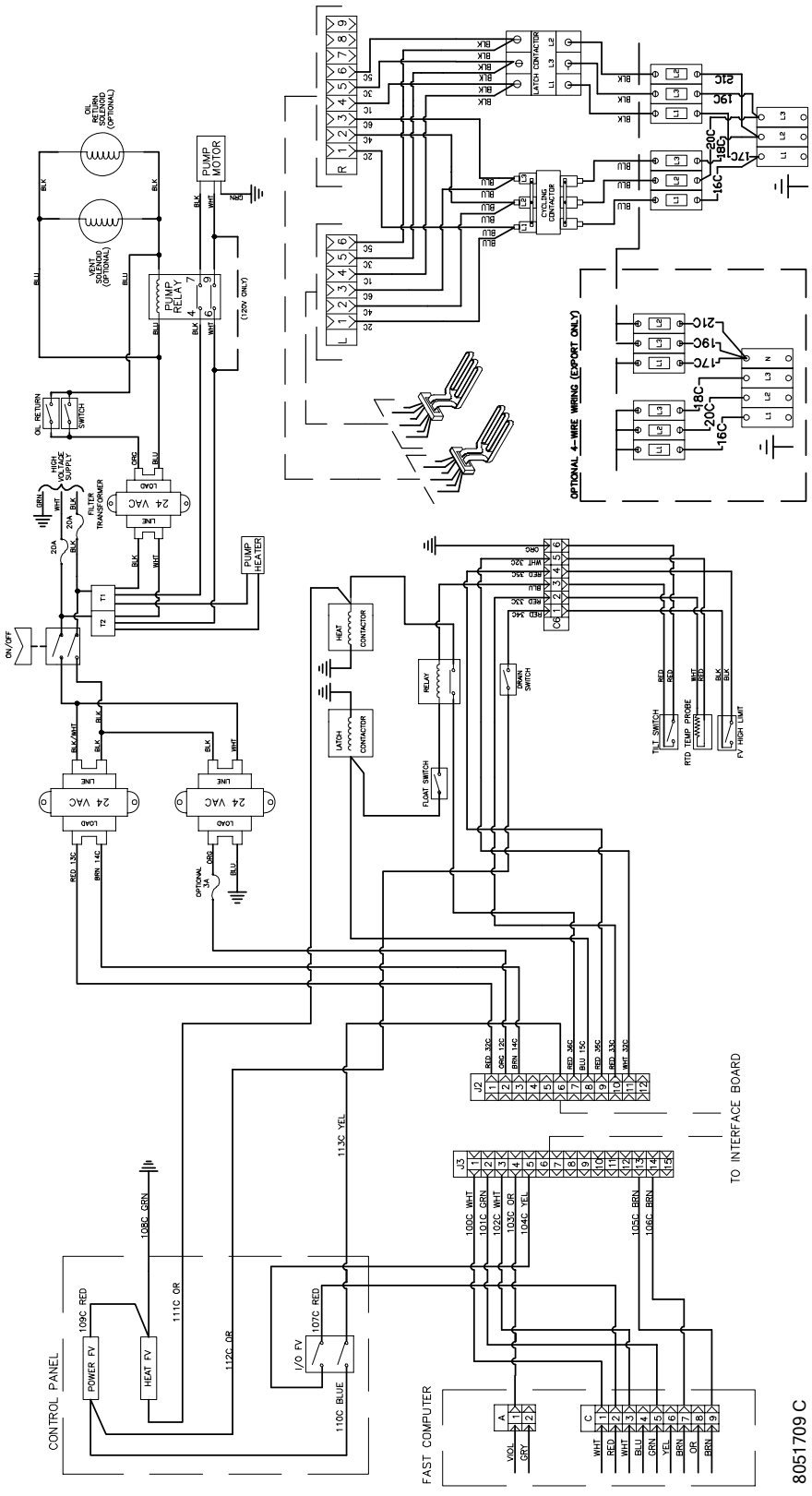
7.4.1 KSCFH218E Fryer Wiring Diagram



7.4.2 Under Fryer Filter (UFF) Wiring Diagram



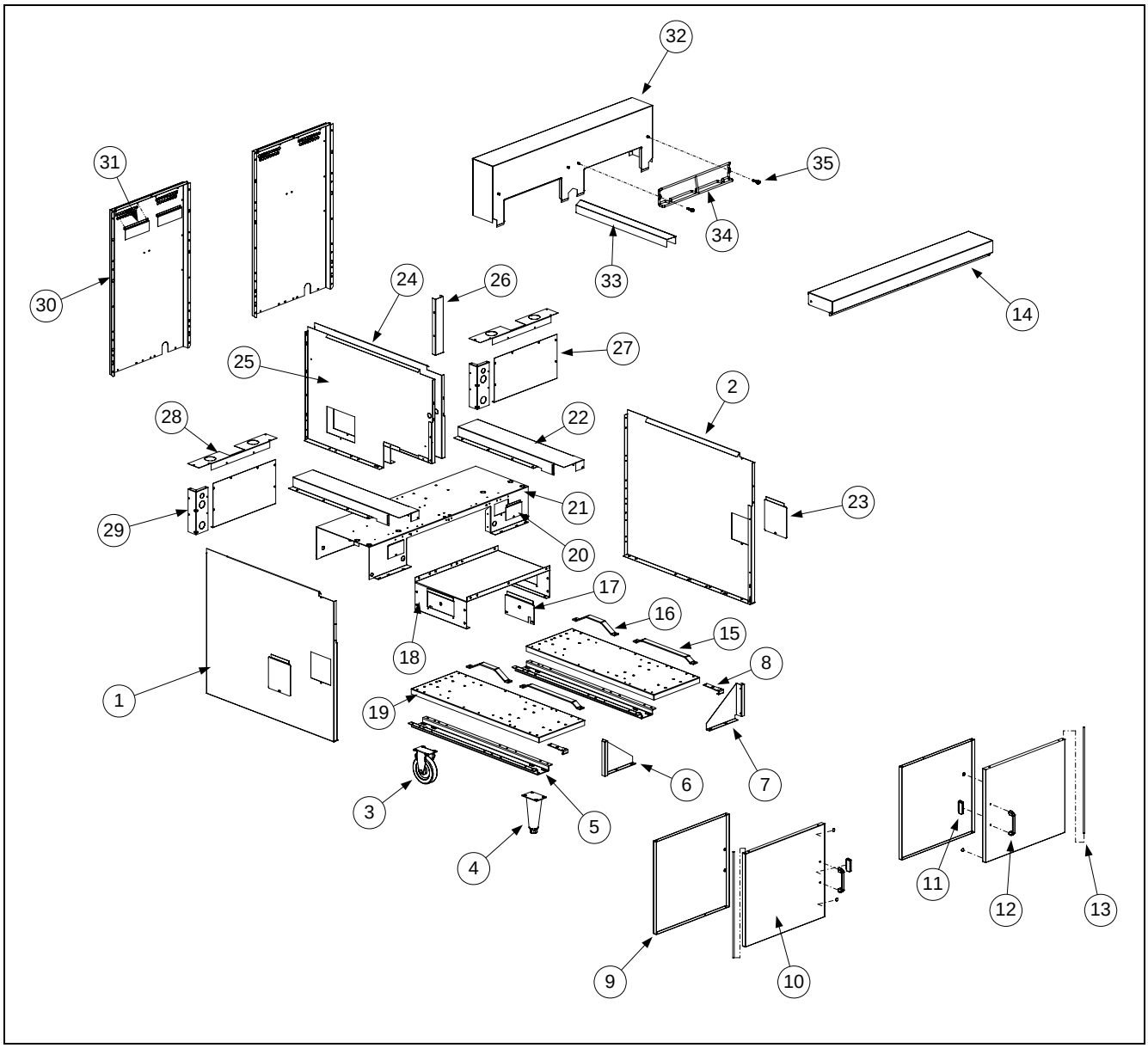
7.4.3 FAST Wiring Diagram



8.1 KSCFH18E Parts List

For parts and/or components not listed, contact the Frymaster Service Hotline at 1-800-551-8633 or 1-318-865-1711 for additional service and parts information.

8.1.1 Cabinetry and Related Components



8.1.1 Cabinetry and Related Components (cont.)

Item	Part #	Description
1	201-1299	Side Panel, Painted, LH
2	202-1299	Side Panel, Painted, RH
3	810-0378	Caster, Stationary- 5" Rigid
4	806-5043	Leg
5	823-3180	Support, Channel- Leg/Caster
6	201-1182	Gussets, L/H
7	202-1182	Gussets, R/H
8	200-1675	Lower Hinge Bracket (Door)
9	200-1185	Door Panel, Inner
10	210-1271SP	Door Panel, Outer
*	106-0855	Door Assembly
11	810-1105	Magnetic Door Catch
12	810-2105	Handle, Door
*	809-0918	Screw, 10-24 x ½" Slotted Head (Use With 810-2105)
*	809-0191	Washer, ¼ Spring-Lock (Use With 810-2105)
13	200-1301	Door Pin
14	210-1262	Top Cap
15	210-1806	Slide, UFF Filter Pan- Front (Long)
16	210-2128	Slide, UFF Filter Pan- Rear (Short)
17	200-1331	Shield, Heat
18	200-1297	Base, Lower Frame
19	200-1198	Channel, Base
20	200-2134	Plate, Mounting (UFF)
21	200-1611	Base, Upper
22	200-1263	Channel, Bus
23	200-1471	Cover, Access Duct
24	202-1245	Panel, Inner- Right Side
25	201-1245	Panel, Inner- Left Side
26	200-2308	Post, Door
27	210-1278	Guard, Wire- Center
28	200-1254	Guard, Wire- Top
29	200-1255	Guard, Wire- Right Side Center
30	200-1252	Back, Cabinet
31	200-1283	Cover, Back Vent
*	809-0360	Screw, Hex Slotted Head W/Washer- #8 x 3/8"

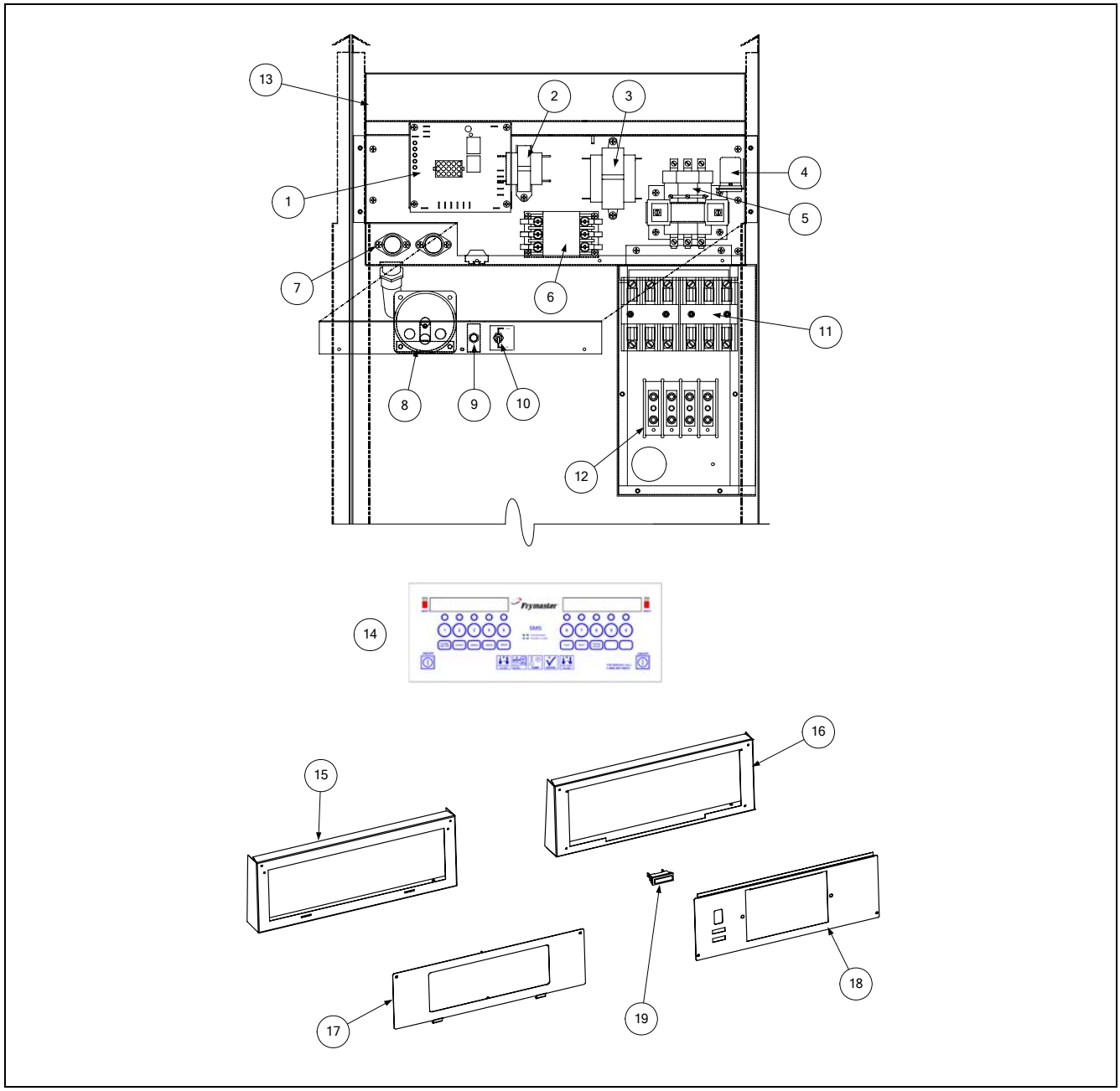
* Not Illustrated

8.1.1 Cabinetry and Related Components (cont.)

Item	Part #	Description
32	823-3551	Housing, Tilt
33	210-1288	Joiner Strip
34	810-2092	Hanger, Basket
35	809-0171	Thumbscrew, ¼ x 1-3/8" Nickel-Plated

* Not Illustrated

8.1.2 Component Box, Computers and Related Components

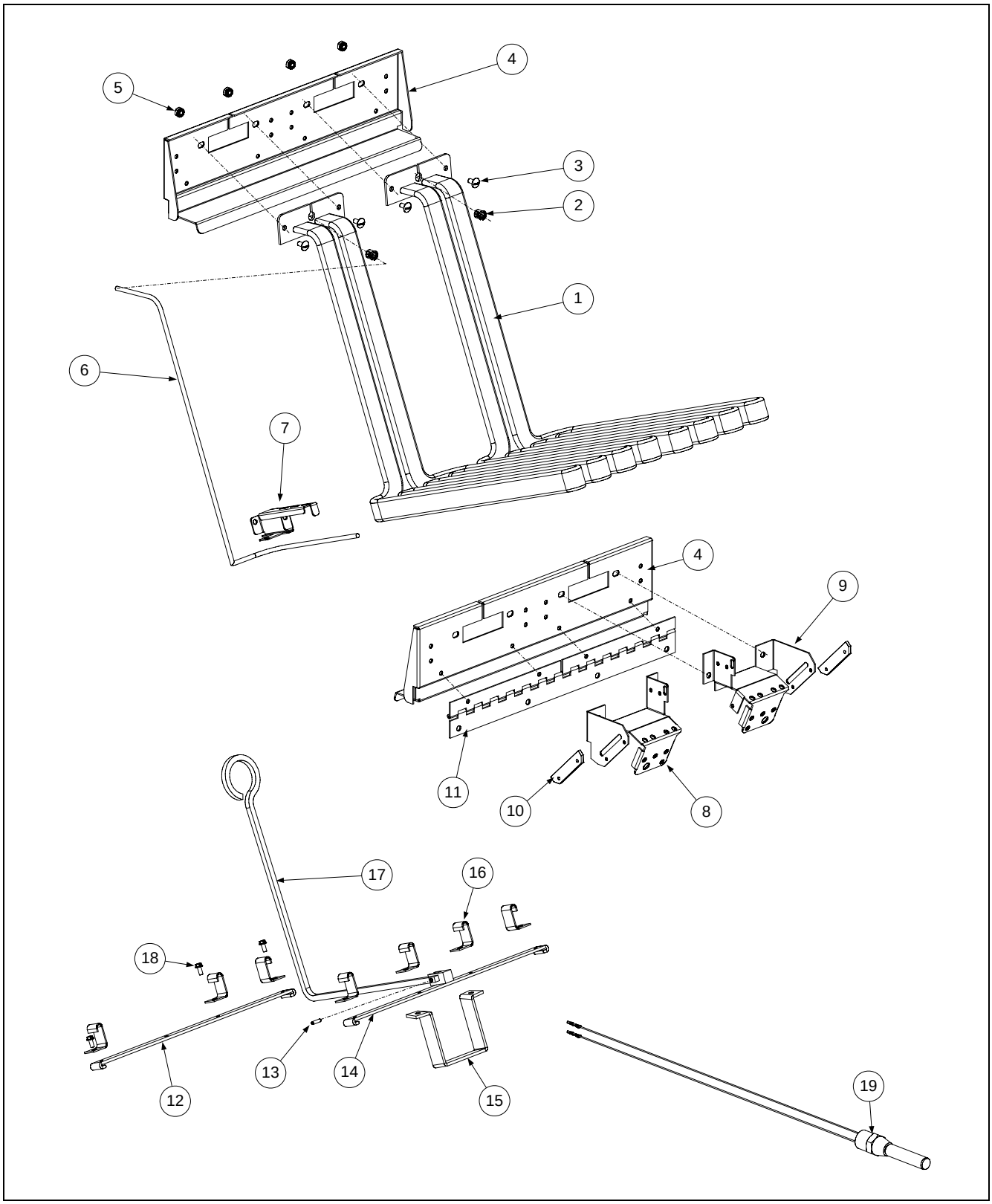


8.1.2 Component Box, Computers and Related Components (cont.)

Item	Part #	Description
1	806-6336	Interface Board, KFC-1
*	106-6671	Interface Board, FAST-Ready
2	807-0979	Transformer, 208-240V, 50/60Hz –12V 20VA
3	807-0680	Transformer, 208-240V, 50/60Hz –24V 20VA
4	807-3611	Relay, 24-Amp
5	807-0884	Contactor, Mercury- 240VAC 50-Amp
6	810-1202	Contactor, Latching- 40-Amp, 3-Pole
7	807-0922	Fuse Holder, Buss Fuse
*	807-2278	Fuse, 20-Amp
8	806-5974SP	Sound Device, KFC-1
*	807-4114	Sound Device, FAST-Ready
9	807-3538	Breaker, Circuit- 5 Amp (208/230 VAC)
10	807-3539	Switch, Toggle- Filter Bypass- ON-OFF
11	807-0501	Fuse Block, Buss #2968, 3-Pole
12	807-3610	Power Block– 3-Phase (Delta)
*	807-2465	Power Block– 3-Phase (Wye)
13	823-3458	Wireway Control Panel (Box) Assembly
*	807-0800	Transformer, 120V 50/60 Hz -24V 50VA (Pump Motor Relay)
*	807-0680	Transformer, 208V, 50/60Hz –24V 20VA (Pump Motor Relay)
14		Computer, KFC-1 Electric
*	106-0063	Non-CE
*	106-0065	CE
15	210-1256	Panel, Control, KFC-1
16	210-3018	Panel, Control, FAST-Ready
17	823-2882	Bezel, Computer, KFC-1
18	230-3884	Bezel, Computer, FAST-Ready
19	807-1502	Lamp, Amber, Heating, 24V

* Not Illustrated

8.1.3 Elements and Related Components



8.1.3 Elements and Related Components (cont.)

Item #	Part #	Description
1	807-3652	Element- 208V 8.5 kW
*	807-3655	Element- 240V 8.5 kW
*	807-3657	Element- 208V 9.0 kW
*	807-3658	Element- 240V 9.0 kW
*	807-2557	Element- 208V 10.25 kW
*	807-3655	Element- 240V 8.5 kW (**USE FOR 220V 7 kW**)
*	807-3660	Element- 220V 8.5 kW
*	807-3661	Element- 220V 10.25 kW
*	807-3662	Element- 230V 7 kW
*	807-3663	Element- 230V 8.5 kW
*	807-3664	Element- 230V 10.25 kW
*	807-2637	Element- 240V 10.25 kW
*	807-3660	Element- 220V 8.5 kW (**USE FOR 200V 7 kW**)
*	807-2137	Connector, Element- Male, 9-Pin
*	807-2135	Connector, Element- Male (High Amp), 6-Pin
*	810-2120	Grid, Mesh- Over Element- Full Vat
2	826-1339	Bushing, .375 x .188" I.D. (Qty:10)
3	826-1330	Screw, 10-32 x 3/8" Slotted Head- SS (Qty: 25)
4	210-1313	Tilt Plate
*	900-5378	Bracket, Tilt Plate Spring
*	809-0358	Turnbuckle, Tilt Plate Spring
*	810-0297	Spring, Tilt Plate
*	200-2932	Cover, Lower Back Wire
5	826-1376	Nut, Keps- 10-32 Hex (Qty: 10)
6	826-1791	Probe, Temperature- 15" (Includes Ty Wrap)
*	807-1068	Connector, 2-Pin
*	809-0567	Ty Wrap, Metal (Probe Lead to Element: 4 Required)
7	910-5022	Bracket, Probe Guard
8	201-1573	Bracket, Element Support- Left Side
9	202-1573	Bracket, Element Support- Right Side
10	816-0214	Nylon Bar, Tilt Plate Spring Bracket (Use .123 x .379" Pop Rivet To Attach)
11	810-0035	Hinge, Tilt- 14" Continuous
12	910-5459	Support, Back- Full-vat Element

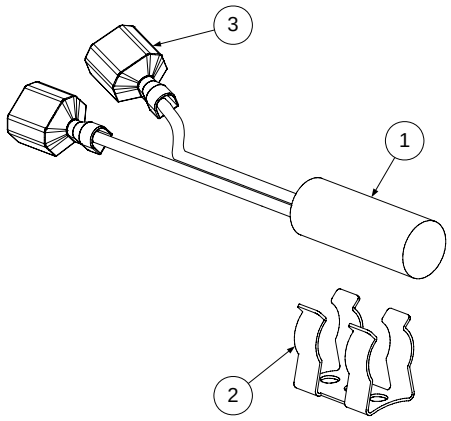
* Not Illustrated

8.1.3 Elements and Related Components (cont.)

Item #	Part #	Description
13	810-1212	Spring Pin, Heating Element Handle
14	823-2534	Support, Front- Full-vat Element (Without Handle and Spring Pin)
15	210-1610	Support, Bottom- Full-vat Element
16	910-2042	Clamp, Element to Support
17	810-1233	Handle, Lift- Full-vat Element
18	809-0518	Screw, 8-32 x 3/8" Hex Washer Slotted
19	806-8035	High-limit Thermostat (Mounts in Frypot)

* Not Illustrated

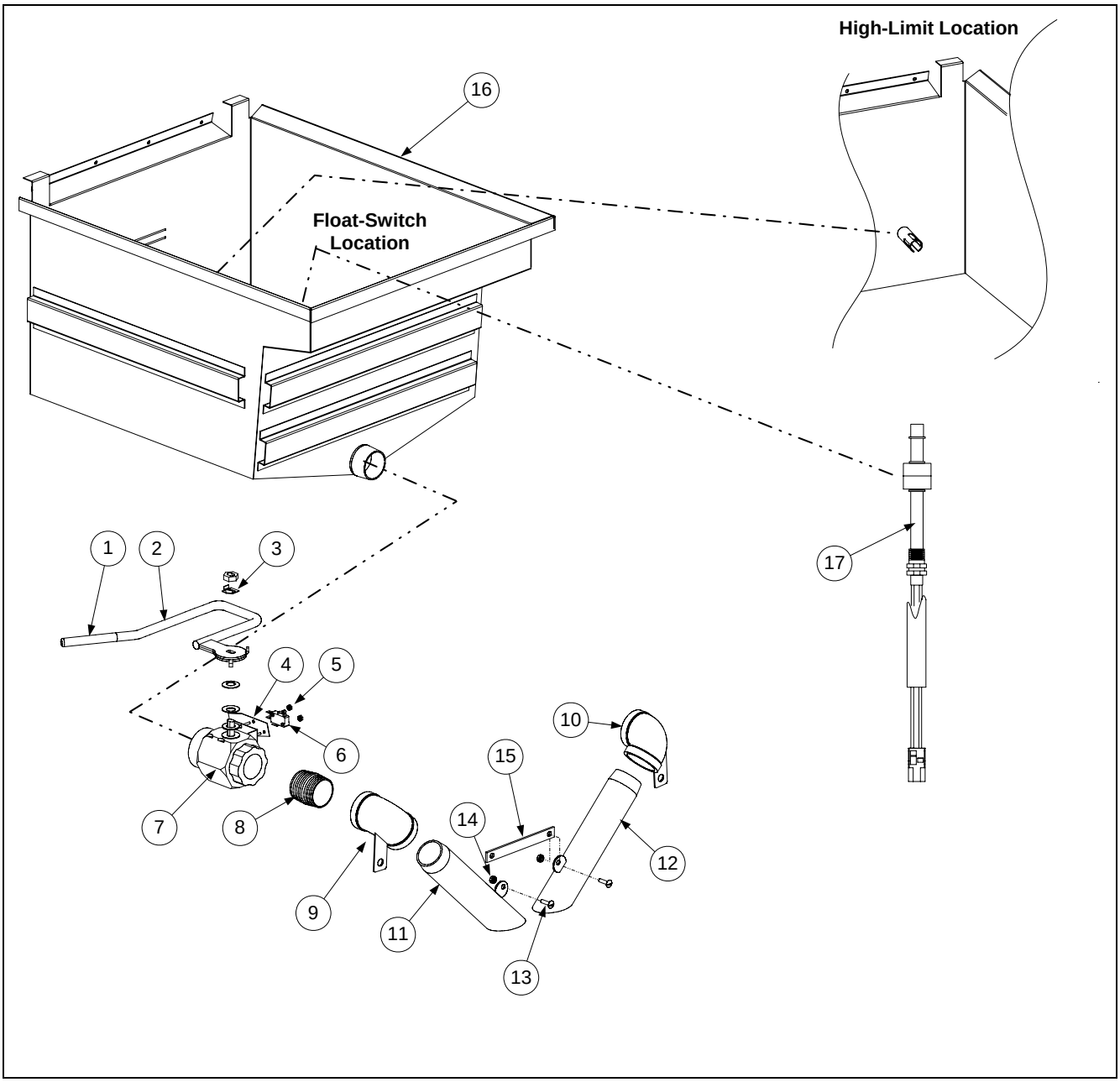
8.1.4 Tilt Safety Switch Components



Item	Part Number	Description
1	806-6849SP	Switch, Tilt Safety
*	809-0874	Ty Wrap, Plastic- 4" (Operating Temperature 265°F)
2	807-1570	Clip, Tilt Switch
3	807-1397	Terminal, Push-On- Fully Insulated
*	809-0250	Nut, Keps- 6-32 Hex
*	809-0096	Screw, 6-32 x 5/8"- Binding, Slotted-Head
*	826-1374	Screw, #10-½ - Hex Washer Head (Qty: 25)
*	809-0766	Nut, SS- 10-32

* Not Illustrated

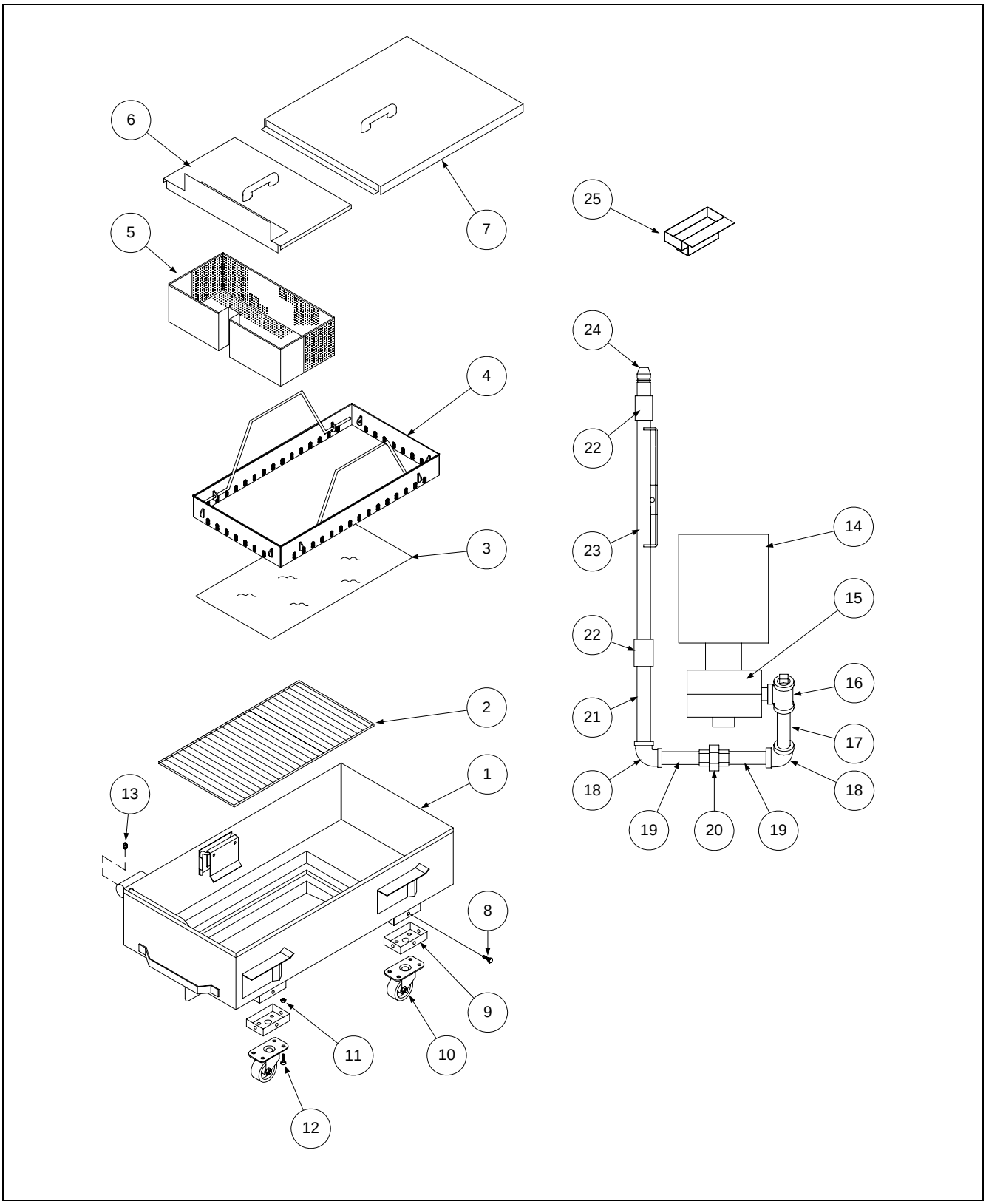
8.1.5 Frypot and Drain Components



8.1.5 Frypot and Drain Components (cont.)

Item	Part #	Description
1	816-0547	Cap, Vinyl- Red
2	823-3224	Handle, Drain Valve
3	200-1257	Retainer, Drain Valve Nut
4	812-0442	Insulation, Microswitch
5	826-1366	Nut, 4-40 Keps Hex With External Tooth (Qty: 25)
6	807-2104	Microswitch, Roller
7	823-3236	Valve, Drain- With Washers, Nut and Bracket
8	813-0687	Nipple, SS- 1-½" x Close
9	823-3221	Elbow With Bracket, Drain- Left
10	823-3222	Elbow With Bracket, Drain- Right
11	823-3456	Drain Pipe- Left
12	823-3358	Drain Pipe- Right
13	809-0123	Screw, 10-32 x ¾" Slotted Head
14	826-1376	Nut, Keps- 10-32 Hex (Qty: 10)
15	210-2311	Clamp, Center- Drain Pipe
16	823-3235SP	Frypot, SS- KSCFH18E
17	106-0960SP	Switch, Float Safety

8.1.6 Filter Pan, Pump Motor and Related Components

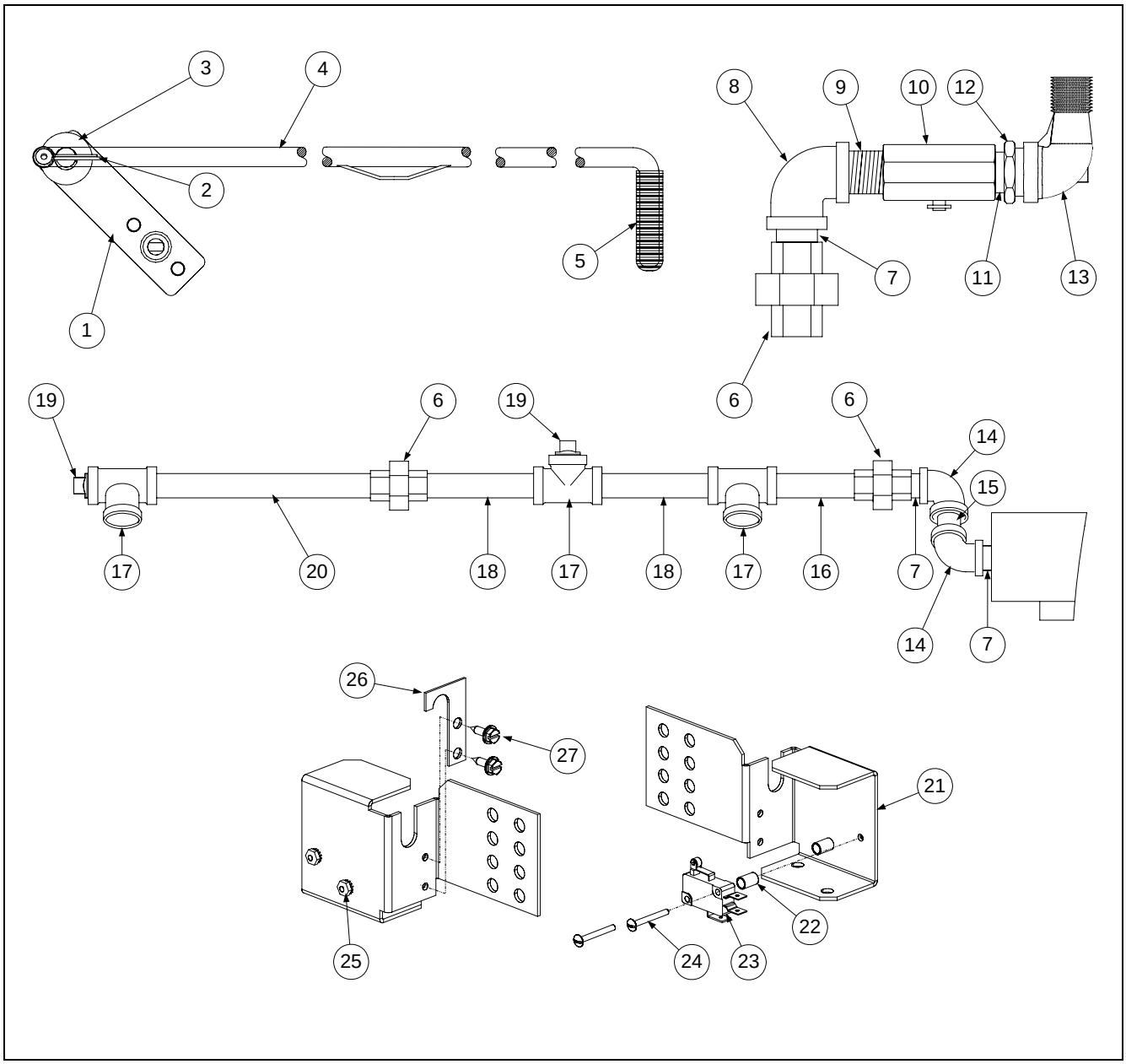


8.1.6 Filter Pan, Pump Motor and Related Components (cont.)

Item	Part #	Description
1	823-3240	Pan, Filter
2	810-2119	Grid, Filter
3	803-0170	Paper, Filter
*	803-0002	Filter Powder
4	823-3201	Ring, Hold-Down (No Handles)
*	823-3202	Handle, Hold-Down Ring
5	823-3204	Crumb Basket
6	823-3241	Lid, Filter Pan- Front
7	210-1295	Lid, Filter Pan- Back
*	810-2105	Handle, Pan Lid, Front and Back- Chrome
*	809-0918	Screw, 10-24 x ½" Slotted (Use With 810-2105)
*	809-0191	Washer, ¼ Spring-Lock (Use With 810-2105)
8	809-0866	Screw, SS- ¼-10 x ½" Phillips Head
9	210-1293	Insert, Mounting Plate- Caster
10	810-2141	Caster, 2"
11	809-0823	Nut, Nylock- ¼-20
12	809-0822	Bolt, ¼-20 x ½" Hex Head
13	813-0679	Plug, SS- 1/8 Square Head
14	810-2100	Motor, Filter Pump
15	810-2098	Pump, Filter- 8GPM
16		Fitting, Oil Suction Start
*	813-0022	Nipple, ½" NPT x Close BM
*	813-0003	Tee, ½" NPT BM
*	813-0156	Plug, Hex Head ½" NPT BM
17	813-0703	Nipple, ½ x 7-¾" NPT BM
18	813-0062	Elbow, ½" x 90° NPT BM
19	813-0265	Nipple, ½ x 2-½" NPT BM
20	813-0173	Union, ½" NPT BM
21	813-0683	Nipple, ½ x 6" NPT BM
22	813-0608	Coupling, Full
23	823-3546	Nipple/Plate Assembly- KFC18E
24	810-0697	Disconnect, Male
*	826-1392	O-Ring, Disconnect (Qty: 5)
25	106-0820SP	Drip Cup Assembly
*	803-0209	Brush, Frypot

* Not Illustrated

8.1.7 Oil Return Components



8.1.7 Oil Return Components (cont.)

Item #	Part #	Description
1	823-3344	Handle, Actuator- Oil Return Valve
2	809-0843	Pin, Cotter- Plated
3	809-0885	Washer, 3/8 x 1 x .083" Type A Plain
4	823-3238	Handle, Oil Return Activate
5	816-0548	Cap, Vinyl- Yellow, Oil Return Handle
6	813-0173	Union, ½" NPT BM
7	813-0022	Nipple, ½" x Close NPT BM
8	813-0634	Elbow, Reducing- ½ x 3/8" x 90° NPT BM
9	813-0644	Nipple, 3/8 x 1-½" NPT BM
10	810-2125	Valve, Ball- Oil Return, 3/8"
11	813-0625	Nipple, 3/8" x Close NPT BM
12	813-0006	Bushing, Reducing- ½ x 3/8" NPT BM
13	813-0706	Elbow, Street- ½" x 90° NPT BM
14	813-0062	Elbow- ½" x 90° NPT BM
15	813-0622	Nipple, ½ x 1-½" NPT BM
16	813-0247	Nipple, ½ x 3-½" NPT BM
17	813-0003	Tee, ½" NPT BM
18	813-0654	Nipple, ½ x 4" NPT BM
19	813-0156	Plug, Pipe- ½" NPT BM
20	813-0672	Nipple, ½ x 8" NPT BM
21	106-0893SP	Bracket Assembly- Oil Return Microswitch- RH
22	810-2144	Spacer, Aluminum- ¼ O.D. x 3/8"
23	807-2104	Microswitch, Oil Return
24	809-0846	Screw, 4-40 x 1" Slotted Head
25	826-1366	Nut, 4-40 Keps External Tooth (Qty: 25)
26	200-1341	Bracket, Oil Return Handle
27	826-1371	Screw, #8 x ½" (Qty: 25)

* Not Illustrated

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