



D, CFD, SCFD, FPD Models

Decathlon Series Gas Fryers

Service & Parts Manual



NON-CE &



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

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

07/2017



8 1 9 5 9 2 2

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

This product has been certified as commercial cooking equipment and MUST be installed by professional personnel as specified. Installation, maintenance and repairs should be performed by your FRYMASTER FACTORY AUTHORIZED SERVICE CENTER.

 DANGER

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

 DANGER

Instructions explaining procedures to be followed MUST be posted in a prominent location in the event the operator detects a gas leak. This information can be obtained from the local gas company or gas supplier.

 WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

 DANGER

Safe and satisfactory operation of your equipment depends on proper installation. Installation MUST conform with local codes, or in absence of local codes, with the National Fuel Gas Code, ANSI Z223.1; The Natural Gas Installation Code, CAN/CGA-B149.1; The Propane Installation Code, CAN/CGA-B149.2; or The latest edition of the National Electric Code, N.F.P.A. 70.

NOTICE

If, during the warranty period, the customer uses a part for this Dean equipment other than an unmodified new or recycled part purchased directly from Frymaster and 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 and 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.

 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.

 **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.

 **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.

 **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 and Dean Service Hotline at 1-800-551-8633.

This equipment is to be installed in compliance with the basic plumbing code of The Building Officials and Code Administrators International, Inc. (BOCA) and the Food Service Sanitation Manual of the Food and Drug Administration.

COMPUTERS
FCC

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 the 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 Communcations du Canada.

 **DANGER**

THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND/OR BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

Operation, installation, and servicing of this product could expose you to airborne particles of glasswool or ceramic fibers, crystalline silica, and/or carbon monoxide. Inhalation of airborne particles of glasswool or ceramic fibers is known to the State of California to cause cancer. Inhalation of carbon monoxide is known to the State of California to cause birth defects or other reproductive harm.

 **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 fry vessels. 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.

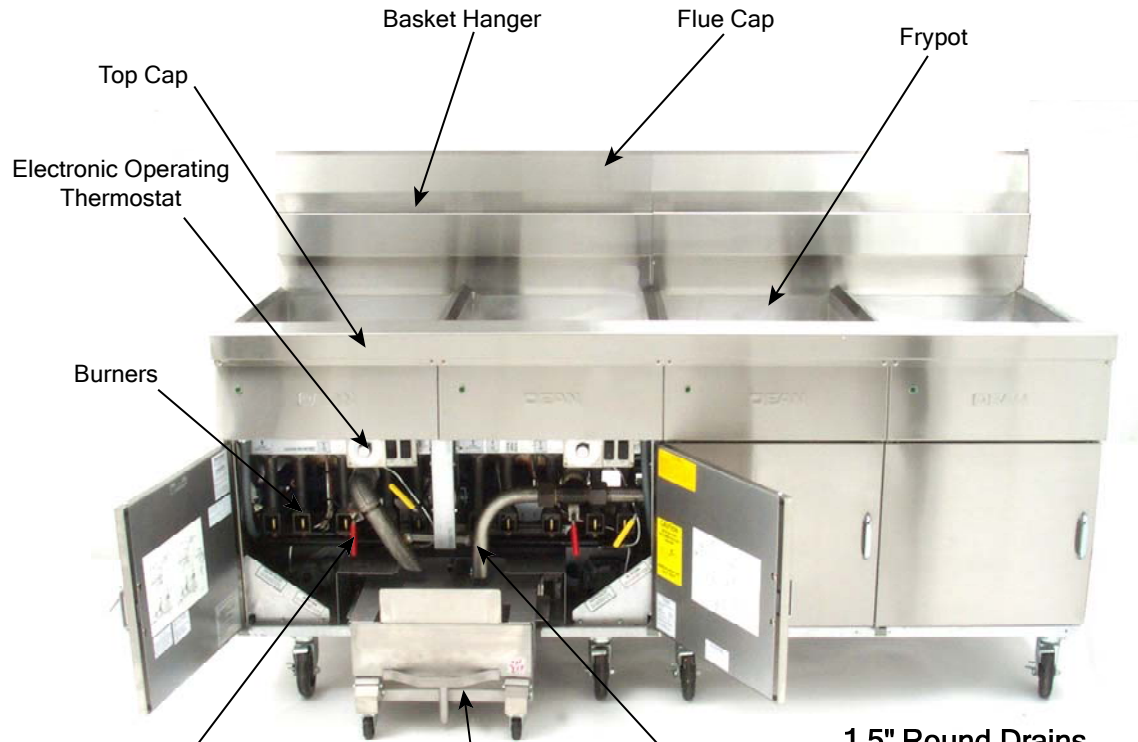


**Decathlon Series Gas Fryers
Service and Parts Manual**

TABLE OF CONTENTS

| | |
|--|------|
| 1. SERVICE PROCEDURES | |
| 1.1 Functional Description..... | 1-1 |
| 1.2 Accessing Fryers for Service..... | 1-8 |
| 1.3 Cleaning the Gas Valve Vent Tube (if applicable)..... | 1-10 |
| 1.4 Adjusting Burner Manifold Gas Pressure..... | 1-10 |
| 1.5 Adjusting the Pilot Flame..... | 1-11 |
| 1.6 Calibrating the Thermatron Controller and Backup Thermostat..... | 1-11 |
| 1.7 Replacing Fryer Components..... | 1-13 |
| 1.8 Troubleshooting and Problem Isolation..... | 1-32 |
| 1.9 Troubleshooting Guides..... | 1-41 |
| 1.10 Wiring Diagrams..... | 1-43 |
| | |
| 2. PARTS LIST | |
| 2.1 Decathlon Primary Components..... | 2-1 |
| 2.2 Control Panel Options; D60 Series..... | 2-14 |
| 2.3 Optional Components and Controllers..... | 2-15 |
| 2.4 Transformers and Component Boxes; Multi-batteried Decathlon..... | 2-18 |
| 2.5 Oil Drain Manifold Components..... | 2-20 |
| 2.6 Oil Return Manifold Components..... | 2-24 |
| 2.7 Oil Return and Oil Flush Components..... | 2-28 |
| 2.8 Under Fryer Filter (UFF) Components; D50 and D60 Series..... | 2-32 |
| 2.9 Single Under Fryer Filter (SUFF) Components..... | 2-37 |
| 2.10 Basket Lift Components; D50, D60, and D80..... | 2-41 |
| 2.11 Trough, Holster, and Cover Components; D60 and D80 Series..... | 2-43 |

FINDING YOUR WAY AROUND THE DEAN DECATHLON



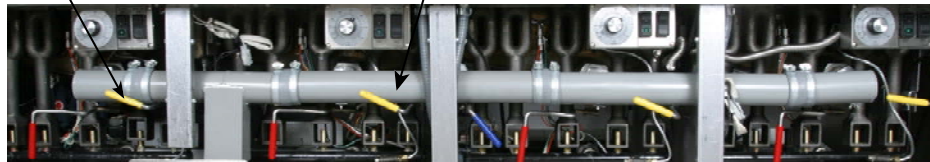
**1.5" Round Drains
(D Models)**

Drain Valve Handle (Red)
Oil Return Handle (Yellow)
Drain Flush Handle (Blue)

Filter Unit

Drain Tubes

Drain Tubes



**3" Round Drains
(SCFD, CFD, & FPD models)**

DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

1.1 Functional Description

Decathlon Series gas fryers contain a welded steel frypot (stainless or cold-rolled) heated by gas flames diffused evenly through tubes built into the frypot.

Flames originate from orifices in a burner manifold positioned beneath cast-iron burners. The burners are positioned in the tube openings, at the front of the frypot. The diameter of the orifices differs for natural (CE:G20/G25) and LP (CE:G31) gas as indicated in the accompanying table.

| NON-CE (Altitudes of 2000 feet or less) | | | | | | | |
|---|-------------|-----------|------------------------|------------------------|---------------|--------------------|-----------|
| MODEL | INPUT (BTU) | GAS TYPE | ORIFICE MM (INCH) | ORIFICE PART NO. | QTY | EQUIPMENT PRESSURE | |
| | | | | | | MBAR | INCH W.C. |
| D20G | 50 | NAT LP | 2.18(#44) 1.40(#54) | 810-2050 810-2324 | 2 | 10 | 4 |
| | | | | | 2 | 27.5 | 11 |
| D50G | 85 | NAT LP | 2.08(#45) 1.32(#55) | 14-0067-45 810-2441 | 4 | 10 | 4 |
| | | | | | 4 | 27.5 | 11 |
| D50G(HP) | 120 | NAT LP | 2.53(#39) 1.51(#53) | 810-2048 810-2059 | 4 | 10 | 4 |
| | | | | | 4 | 27.5 | 11 |
| D50GDDHP | 115 | NAT LP | 2.44(#41) 1.51(#53) | 14-0067-41 810-2059 | 4 | 10 | 4 |
| | | | | | 4 | 27.5 | 11 |
| D60G | 112 | NAT LP | 2.08(#45) 1.32(#55) | 14-0067-45 810-2441 | 5 | 10 | 4 |
| | | | | | 5 | 27.5 | 11 |
| D60G(HP) | 150 | NAT LP | 2.53(#39) 1.51(#53) | 810-2048 810-2059 | 5 | 10 | 4 |
| | | | | | 5 | 27.5 | 11 |
| D80G | 122 | NAT LP | 2.26(#43) 1.40(#54) | 810-2049 810-2324 | 5 | 10 | 4 |
| | | | | | 5 | 27.5 | 11 |
| D80G(HP) | 165 | NAT LP | 2.58(#38) 1.61(#52) | 810-2062 810-2063 | 5 | 10 | 4 |
| | | | | | 5 | 27.5 | 11 |
| CE ONLY (Altitudes of 2000 feet or less) | | | | | | | |
| MODEL | INPUT (kW) | GAS TYPE | ORIFICE MM (INCH) | ORIFICE PART NO. | QTY/ COLOR | EQUIPMENT PRESSURE | |
| | | | | | | MBAR | INCH W.C. |
| D20G | 15,0 | G20 | 2,40 | 810-2060 | 2/BLUE | 10,0 | 4,0 |
| | | G25 | 2,40 | 810-2060 | 2/BLUE | 15,0 | 6,0 |
| | | G31 | 1,51 | 810-2059 | 2/RED | 27,0 | 10,8 |
| D50G | 30,0 | G20 | 2,40 | 810-2060 | 4/BLUE | 10,0 | 4,0 |
| | | G25 | 2,40 | 810-2060 | 4/BLUE | 15,0 | 6,0 |
| | | G31 | 1,51 | 810-2059 | 4/RED | 27,0 | 10,8 |
| D60G | 37,5 | G20 | 2,40 | 810-2060 | 5/BLUE | 10,0 | 4,0 |
| | | G25 | 2,40 | 810-2060 | 5/BLUE | 15,0 | 6,0 |
| | | G31 | 1,51 | 810-2059 | 5/RED | 27,0 | 10,8 |
| D80G | 37,5 | G20 | 2,40 | 810-2060 | 5/BLUE | 10,0 | 4,0 |
| | | G25 | 2,40 | 810-2060 | 5/BLUE | 15,0 | 6,0 |
| | | G31 | 1,51 | 810-2059 | 5/RED | 27,0 | 10,8 |

DECATHLON SERIES GAS FRYERS

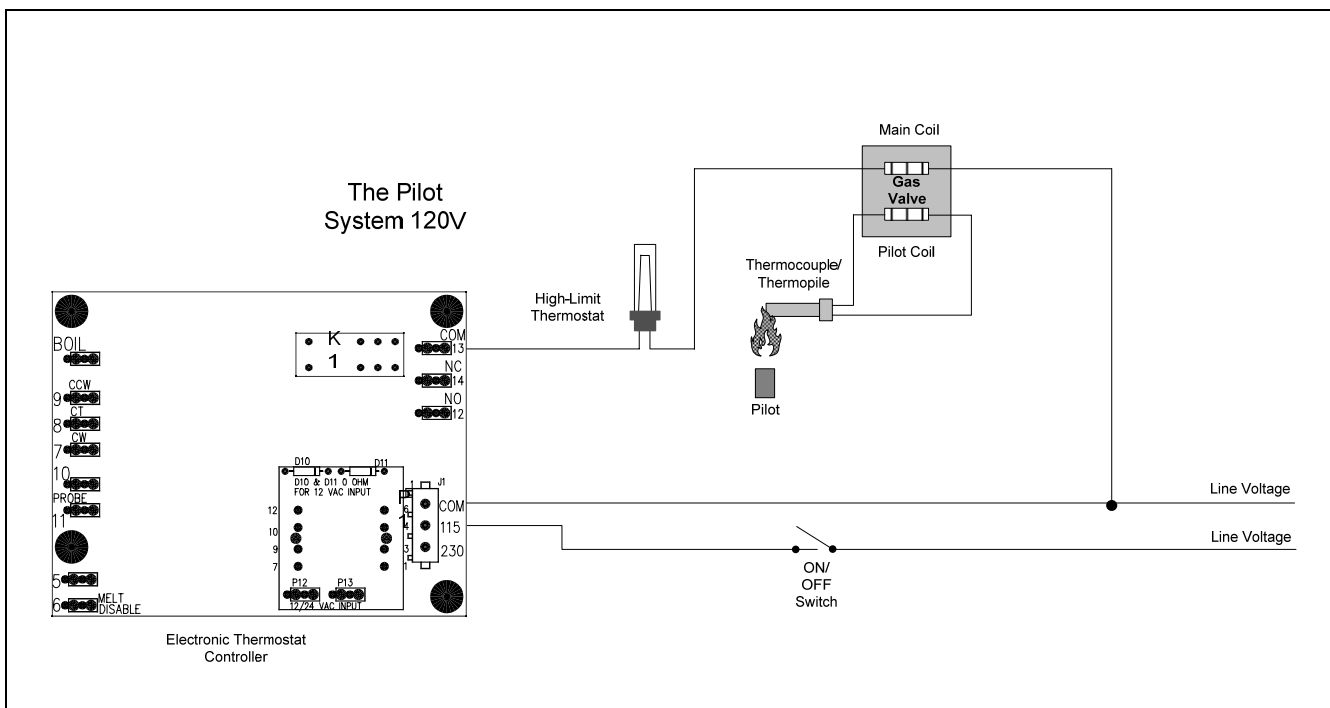
CHAPTER 1: SERVICE PROCEDURES

1.1 Functional Description (cont.)

An electromechanical gas valve regulates gas flow to the manifold. Decathlon Series gas fryers are equipped with either a 120V valve system or a 24V valve system. Unit configurations include either a pilot ignition system (standing pilot) or an electronic ignition system.

Pilot System Configuration

The pilot system is comprised of the pilot orifice, pilot hood, and a thermopile. The pilot serves two purposes: light the burner and heat the thermocouple (some systems incorporate a thermopile). In operation, the thermocouple is in contact with the pilot flame and generates millivolts. The millivolt output energizes the gas valve pilot coil, which in turn opens the pilot valve. If the pilot flame is extinguished, the gas valve pilot coil loses voltage and the pilot valve closes. The main valve of the gas valve will not open if the pilot valve is not open. The pilot flame must be manually lit when the fryer is first placed into operation. A separate 120V circuit, activated by the fryer ON/OFF switch, provides voltage through the Thermatron to the gas valve main coil, which opens the main valve.



Electronic Ignition Configuration

In units configured for electronic ignition, an ignition module connected to an ignitor assembly replaces the pilot system. The ignition module performs three important functions: provide an ignition spark, supply voltage to the gas valve, and proof the pilot flame.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

Electronic Ignition Configuration (cont.)

The module contains a 60-second time delay circuit and a coil that activates the gas valve. The ignitor assembly consists of a spark plug, a pilot, and a flame sensor element.

At start-up the ON/OFF switch is placed in the ON position, supplying 12 VDC to the heat control circuitry in the controller or computer and to one side of the heat relay coil on the interface board. If resistance in the temperature probe indicates the temperature in the frypot is below 180°F (82°C), the current flows through a melt cycle circuit where a timer switch alternately closes for 3 seconds and opens for 24 seconds. If the temperature is 180°F (82°C) or above, the current flows through a heat circuit, bypassing the timer switch. In either case, current is supplied to the other leg of the heat relay coil which then closes an electronic switch in the 24 VAC circuit to provide current to the ignition module. **NOTE:** The listed melt cycle times and exit temperature pertain to the Compu-Fry computer only.

Circuitry in the ignition module sends 24 VAC current to the gas valve via a normally closed high-limit switch and a drain safety switch. Simultaneously, the module causes the ignitor to spark for up to 60 seconds to light the pilot flame. A flame sensor verifies that the pilot is lit by measuring the flow of microamps through the flame. If the pilot does not light (or is extinguished), current to the ignition module is interrupted, preventing the main valve from opening, and the ignition module "locks out" until the power switch is turned OFF, then back ON.

A temperature probe monitors the temperature in the frypot. When the programmed setpoint temperature is reached, resistance in the probe causes the heat cycle circuitry in the controller to interrupt current flow through the heat relay. This in turn interrupts the 24 VAC current to the ignition module, resulting in closure of the gas valve.

NOTE: In September 2006, these modules were replaced with black Honeywell modules (Kit, 826-2117). Operationally they are similar. The new modules have a 4.5 second delay before sparking and lockout at 90 seconds. Unlike previous modules, microamp readings on the new black modules will move up and down as the module pulses on and off and this is an indication that the module is functioning.

When installing the new modules into an older unit with a Fast GO board, a resistor (provided in module kit) is needed to adjust melt cycle to accommodate the 4.5 second delay.

Control Options

Decathlon Series gas fryers may be equipped with operating thermostat controls (optional backup-only; available with electronic thermostat or computer), Thermatron, or Compu-Fry computers.

In fryers equipped with Thermatron, the fryer is turned on and off by means of a rocker switch and the temperature is set by adjusting a potentiometer. An interface board is located in the component box (shield) behind the control panel (computer-equipped) or in a component box inside the cabinet (Thermatron-equipped).

DECATHLON SERIES GAS FRYERS

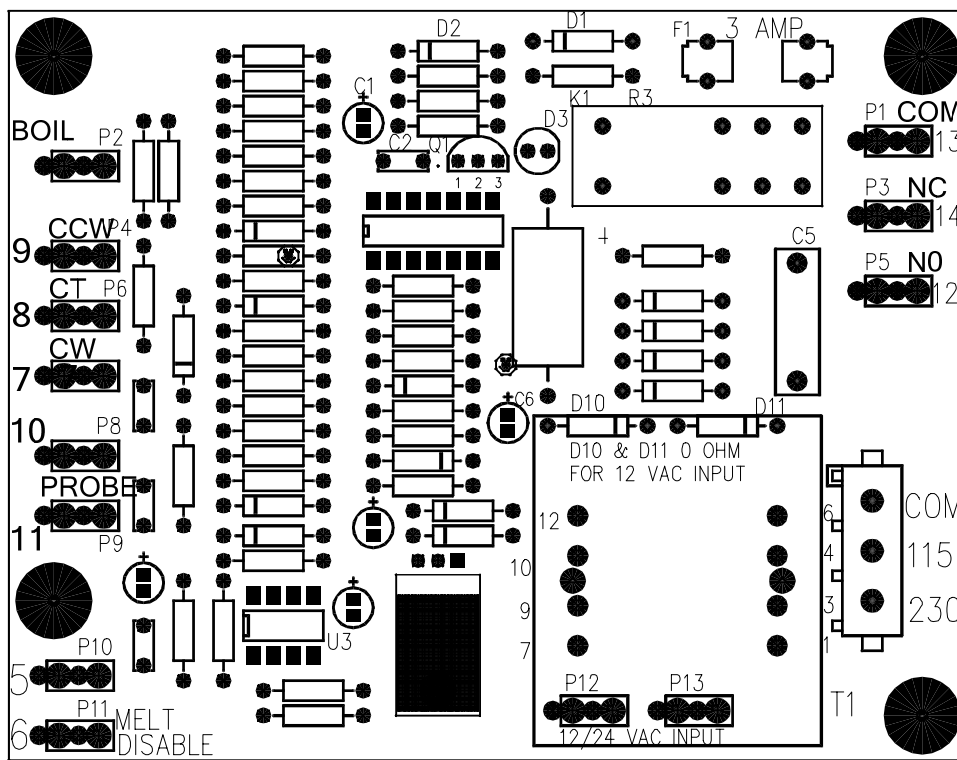
CHAPTER 1: SERVICE PROCEDURES

Interface Boards

The interface board provides a link between the controller/computer and the fryer's individual components without requiring excessive wiring, and allows the controller to execute commands from one central point. Two types of interface boards may be used in Decathlon Series gas fryers; the type used depends on the fryer configuration.

In units configured for Thermatron, P/N 826-2086 (115/230V) is used; in units configured for Compu-Fry computers, P/N 106-6710 is used.

IFB 826-2086 (115/230V): These boards are used in Decathlon fryers equipped with Thermatron control systems.



THERMATRON P/N 826-2086

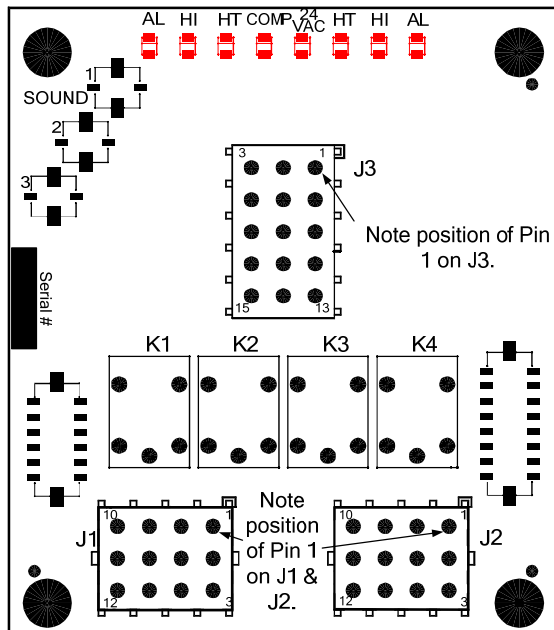
Thermatron systems incorporate a temperature probe, a potentiometer, and a temperature control circuit board. This system is more accurate and reliable than a standard thermostat. The temperature probe measures oil temperature via resistance (ohms); as oil temperature rises, resistance decreases. The potentiometer sets the oil temperature via resistance (ohms). The temperature control circuit board compares the resistance from the probe and potentiometer and cycles the burner on and off as necessary.

DECATHLON SERIES GAS FRYERS

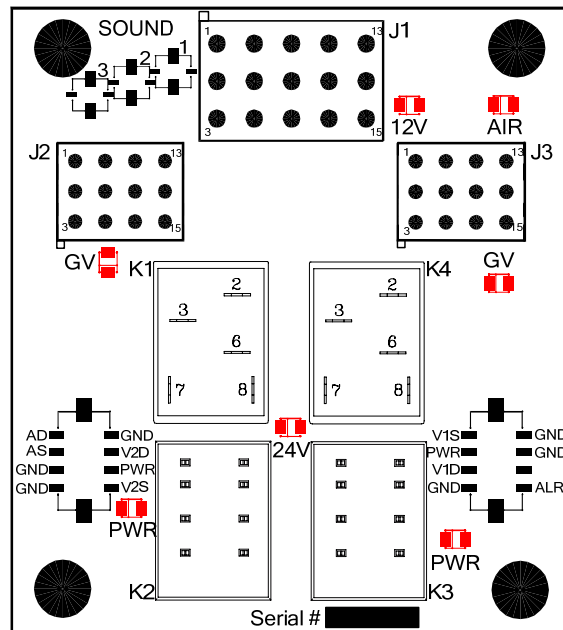
CHAPTER 1: SERVICE PROCEDURES

Interface Boards (cont.)

IFB 106-6669 & 106-6710: These interface boards are used in Decathlon fryers with Frymaster computer control systems.



INTERFACE BOARD P/N 106-6669



INTERFACE BOARD P/N 106-6710

| FREQUENTLY USED TEST POINTS FOR INTERFACE BOARD P/N 806-4549 (previous style) | | | |
|--|---------------|---------------------------|--------------|
| Test | Meter Setting | Pins | Test Results |
| 12VAC Power to Controller | 50VAC Scale | 1 and 3 on J3 | 12-18 |
| 24VAC Power to Right Module | 50VAC Scale | 8 on J3 and GROUND | 22-28 |
| 24VAC Power to Left Module | 50VAC Scale | 8 on J1 and GROUND | 22-28 |
| 12VDC Power to Right BL Relay | 50VDC Scale | 7 on J2 and 9 or 12 on J3 | 12-18 |
| 12VDC Power to Left BL Relay | 50VDC Scale | 9 on J2 and 9 or 12 on J1 | 12-18 |
| 24VAC Power to Right High-Limit | 50VAC Scale | 7 on J3 and GROUND | 22-28 |
| 24VAC Power to Left High-Limit | 50VAC Scale | 7 on J1 and GROUND | 22-28 |
| 120VAC Power* | 250VAC Scale | 11 on J3 and GROUND | 110-125 |
| 120VAC Power To 120VAC Gas Valve* | 250VAC Scale | 10 on J3 and GROUND | 110-125 |
| Probe Resistance (Right)** | R x 1000 Ohms | 2 on J3 and 4 on J3 | *** |
| Probe Resistance (Left)** | R x 1000 Ohms | 2 on J1 and 4 on J1 | *** |
| * Where Applicable | | | |
| ** Disconnect 15-pin harness from controller before testing probe circuit. | | | |
| *** See Probe Resistance Charts in this chapter. | | | |

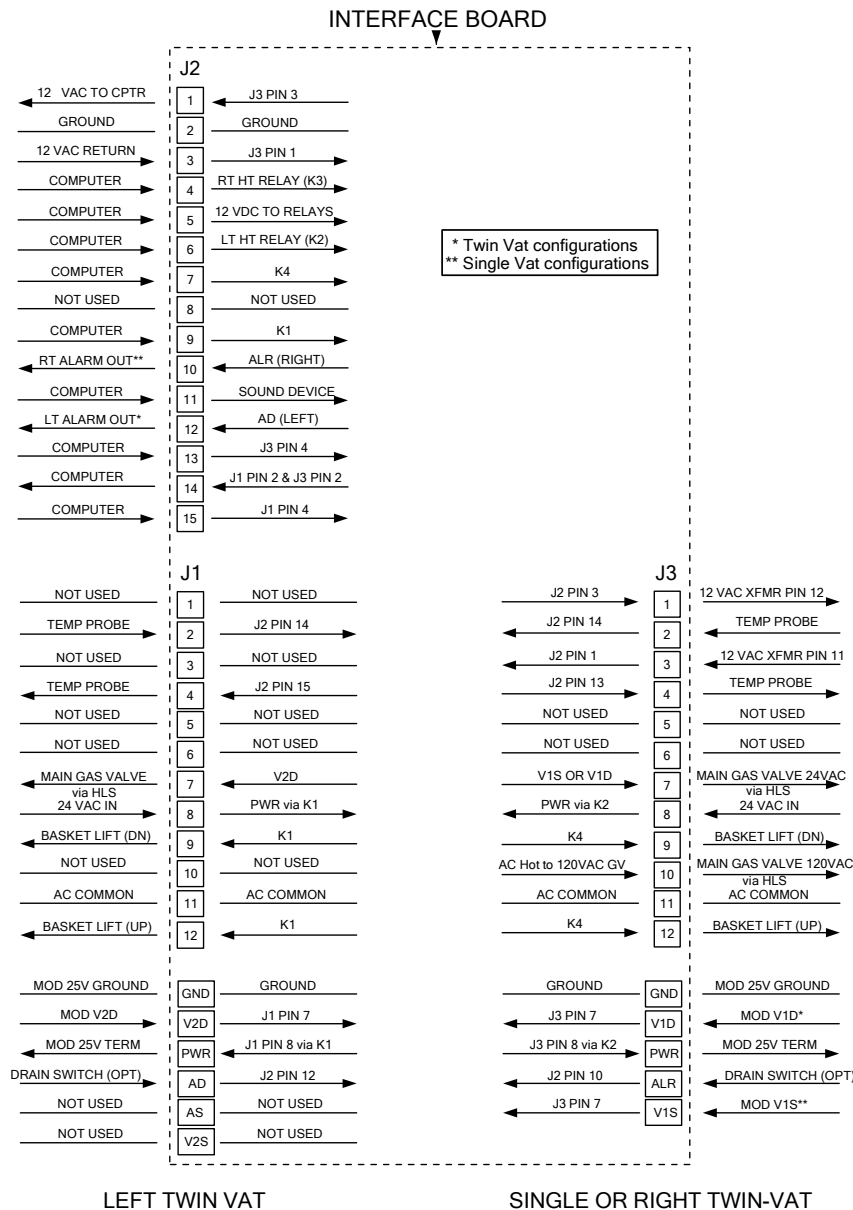
DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

Interface Boards (cont.)

| P/N 806-4549 INTERFACE BOARD (previous style) | |
|---|--|
| LED DIAGNOSTIC LIGHTS | |
| 12V | Indicates 12 VAC from transformer |
| 24V | Indicates 24 VAC from transformer |
| GV | Indicates 24 VAC to gas valve |
| PWR | Indicates 24 VAC to PWR via K1 (L) or K2 (R or F) |
| AIR | Not Applicable to Decathlon Series Gas Fryers |

The board contains two heat relays (K2 and K3), and two basket lift relays (K1 and K4). NOTE: On factory-original units not equipped with basket lifts and on service interface boards, the board will have no basket lift relays installed.



CURRENT FLOW THROUGH INTERFACE BOARD 806-4549 (previous style)

DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

Thermostats

Different types of thermostats are used in Decathlon Series gas fryers, depending on fryer configuration.

Fryers equipped with an *optional backup operating-thermostat* and/or *Thermatron* use a dial to adjust temperature. In this configuration, the probe resistance varies directly with the temperature. *As the temperature rises, resistance decreases at a rate of approximately 2 ohms for every 1°F (approximately 3.7 ohms for every 1°C).*

Fryers equipped with computer controls have a *temperature probe*. In this configuration, the probe resistance varies directly with the temperature. *As the temperature rises, resistance increases at a rate of approximately 2 ohms for every 1°F (approximately 3.7 ohms for every 1°C).* Circuitry in the computer monitors the probe resistance and controls burner firing when the resistance exceeds or falls below programmed temperatures (setpoints). The temperatures are programmed by means of a keypad on the face of the computer.

All Decathlon Series gas fryers are equipped with a *high-limit thermostat*. In the event that the fryer fails to control the oil temperature, the high-limit thermostat prevents the fryer from overheating to flash point. The high-limit thermostat acts as a normally closed power switch that opens when exposed to temperatures above 410°F/210°C (CE) to 450°F/232°C (non-CE). CE and non-CE high-limits are not interchangeable.

1.2 Accessing Fryers for Servicing

 **DANGER**

Moving a fryer filled with cooking oil may cause spilling or splattering of the hot liquid. Follow the draining instructions included with the fryer before attempting to relocate a fryer for servicing.

1. Shut off the gas supply to the unit. Unplug the power cords. Remove any attached restraining devices.
2. Disconnect the unit from the gas supply.
3. Relocate the fryer for service accessibility.
4. After servicing is complete, reconnect the unit to the gas supply, reattach restraining devices, and plug in the electrical cords.

 **DANGER**

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.

DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

Restraints

Once the fryer has been positioned at the frying station, use a carpenter's level placed across the top of the frypot to verify that the unit is level, both side-to-side and front-to-back.

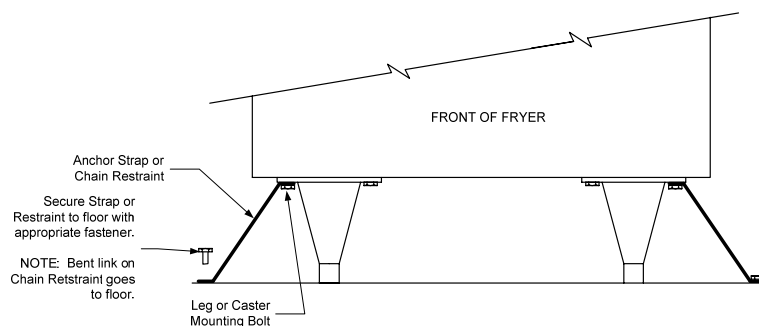
To level fryers equipped with legs, the bottom of the legs can be screwed out up to one inch for leveling. Legs should also be adjusted so that the fryer(s) are at the proper height in the frying station.

For fryers equipped with casters, there are no built-in leveling devices. The floor where the fryers are installed must be level.

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.

DANGER

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



NOTE: If you need to relocate a fryer installed with legs, remove all weight from each leg before moving. If a leg becomes damaged, contact your service agent for immediate repair or replacement.

DANGER

Hot oil can cause severe burns. Avoid contact. Under all circumstances, oil must be removed from the fryer before attempting to move it to avoid oil spills, falls, and severe burns. This fryer may tip and cause personal injury if not secured in a stationary position.

DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

1.3 Cleaning the Gas Valve Vent Tube (if applicable)

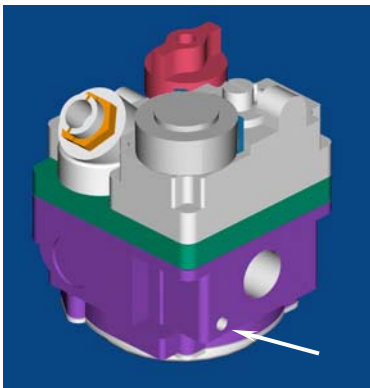
1. Set the fryer power switch and the gas valve to the OFF position.
2. Carefully unscrew the vent tube from the gas valve. **NOTE:** The vent tube may be straightened for ease in removal.
3. Pass a piece of ordinary binding wire (.052 inch diameter) through the tube to remove any obstruction. Remove the wire and blow through the tube to ensure it is clear.
4. Reinstall tube and bend so that the opening is pointing downward.

1.4 Adjusting Burner Manifold Gas Pressure

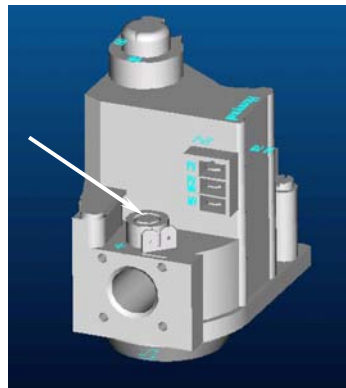


WARNING
This task should be performed by qualified service personnel only.

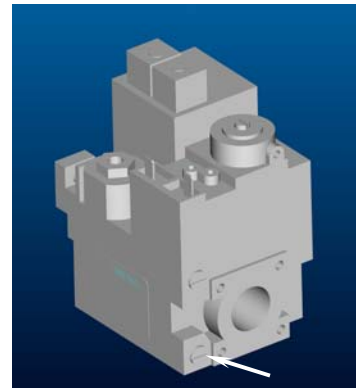
1. Ensure that the gas valve knob is in the OFF position.
2. Remove the pressure tap plug from the gas valve (see arrows in photos below for location).



Pilot Ignition Valve
(Line Voltage)



Non-CE Electronic
Ignition Valve



CE Pilot Ignition Valve

3. Insert the manometer fitting into the pressure tap hole.
4. Place the gas valve in the ON position then place the fryer power switch in the ON position. When the burner lights and continues to burn, check the gas pressure reading against the table on page 1-1.
5. To adjust burner gas pressure, remove the cap from the gas valve regulator and adjust to correct pressure.
6. Place the fryer power switch and the gas valve in the OFF position. Remove the manometer fitting from the pressure tap hole and reinstall the pressure tap plug.

1.5 Adjusting the Pilot Flame

1.5.1 Main Pilot

1. Remove the cap from the pilot adjustment screw hole on the gas valve.
2. Using a small, flat-tipped screwdriver, turn the pilot adjusting screw counterclockwise to increase length of flame or clockwise to decrease length of flame. Adjust to obtain a flame from 1 inch to 1½ inches long.
3. Reinstall the pilot adjustment screw cap.

1.5.2 Trailing Pilot

In older Decathlon units, the trailing pilot may need adjusting. Adjust the trailing pilot valve located on the burner manifold until a flame from 1 inch to 1½ inches long is obtained. Current production units do not have an adjustment.

1.6 Calibrating the Thermatron (and Optional Backup Operating Thermostat)

1.6.1 Thermatron

1. Fill the frypot to the lower OIL-LEVEL line with cooking oil. If solid shortening is used, it must be melted before starting the calibration procedure.
2. Ensure the fryer ON/OFF switch is in the OFF position and light the pilot.
3. Place the fryer ON/OFF switch in the ON position. Set the electronic thermostat dial to 325°F (162°C).
4. Allow the oil to equalize at setpoint temperature. This is evident when the burners have cycled on and off several times.
5. Insert a thermometer or pyrometer into the frypot within 3 inches of the probe bulb. Ensure the tip of the thermometer/pyrometer does not touch the frypot burner-tube.
6. If the temperature on the thermometer is higher or lower than 325°F (162°C), the knob is out of calibration.
7. Calibrate the knob by first loosening the setscrew and slowly turn the knob to match the temperature reading of the thermometer. Tighten the setscrew, ensuring the knob does not move on the shaft during tightening.
8. Allow burners to cycle on and off several times, then recheck oil temperature as described in Step 5. If the thermostat dial temperature matches the thermometer temperature, the thermostat is calibrated. If not, repeat Step 7.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.6.2 Backup Operating Thermostat (Optional)

1. Fill the frypot to the lower OIL-LEVEL line with oil. If solid shortening is used, it must be melted before starting the calibration procedure.
2. Light the pilot.
3. Set the temperature control knob to 350°F/177°C.
4. Let the burners cycle on and off automatically three times in order for the cooking oil temperature to become uniform. If necessary, stir to get all shortening in the bottom of the frypot melted.
5. Insert a thermometer or pyrometer probe into the oil, with the end near the fryer temperature-sensing probe.

NOTE: The temperature-sensing probe is mounted on the frypot tube.

6. When the burner starts for the fourth time, the thermometer/pyrometer reading should be within the range 335-360°F (168-182°C). If it is not, calibrate as follows:
 - a. Remove the thermostat knob by pulling straight out on the knob with a firm, steady pull. The temperature adjusting screw is located in the middle of the thermostat shaft.
 - b. Insert a small-bladed flat-tipped screwdriver into the adjusting screw. Turn the adjusting screw in ¼-turn increments to adjust the temperature. Turning the screw clockwise decreases the temperature; turning it counter-clockwise increases the temperature. **DO NOT** allow the thermostat shaft to turn while turning the adjusting screw.
 - c. Recheck the thermometer/pyrometer reading the next time the burner comes on.
 - d. Repeat steps 6.b. through 6.c. until the thermometer/pyrometer reading remains within the range 335-360°F (168-182°C) through several cycles. If calibration cannot be obtained for any reason, call a Factory Authorized Service Center for service.
 - e. Reinstall the thermostat knob.
7. Remove the thermometer or pyrometer.

DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

1.7 Replacing Fryer Components

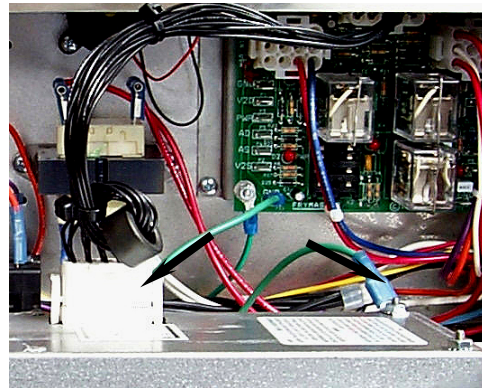
1.7.1 Replacing the Computer

1. Disconnect the fryer from the electrical supply.
2. Unscrew the two computer panel screws. The computer panel is hinged at the bottom and will swing open from the top.



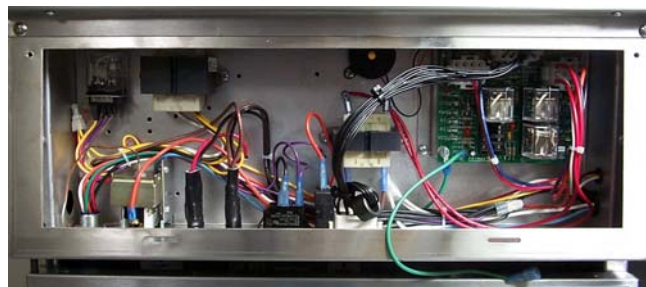
Computer panel in "down" position.

3. Unplug the fryer wiring harness and ground wire from the back of the computer.



Disconnect the 15-pin connector and ground wire (arrows) from the computer.

4. Remove the computer by lifting it from the hinge slots in the fryer control panel frame.
5. Reverse the procedure to install a new computer.



Control panel frame with computer removed.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.7.2 Replacing the Backup Thermostat (if applicable)

1. Disconnect the fryer from the electrical supply.
2. Drain cooking oil from frypot.
3. Remove thermostat knob.
4. Disconnect the wiring plug(s) from the component shield/control box.
5. Disconnect leads from terminal block.
6. Remove screws securing the thermostat bracket to fryer.
7. Follow Steps 5-7 in Section 1.7.4, *Replacing the High-limit Thermostat*, to remove thermostat from frypot.
8. Remove the defective thermostat from the thermostat bracket and replace with a known good thermostat. Use care not to damage the probe bulb and lead on the new thermostat.
9. Reverse the above steps to install the replacement.

 **CAUTION**

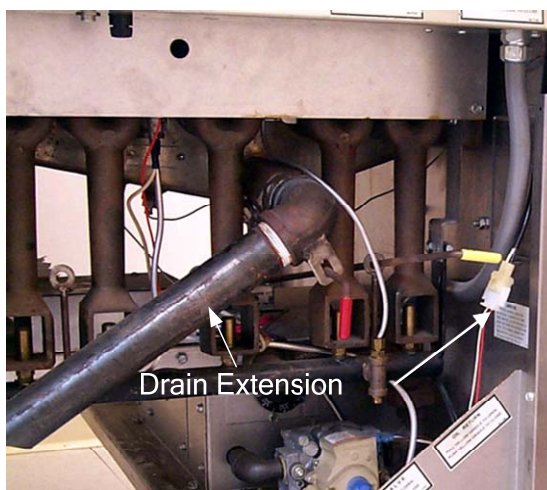
**The backup operating thermostat must be calibrated after installation is complete.
Refer to Section 1.6.2 for calibration instructions.**

DECATHLON SERIES GAS FRYERS

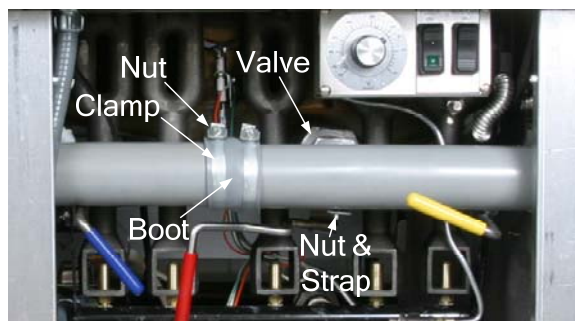
CHAPTER 1: SERVICE PROCEDURES

1.7.3 Replacing the Temperature Probe; Computer-equipped Fryers

1. Disconnect the fryer from the electrical supply.
2. Drain cooking oil from the frypot. Allow the frypot to cool completely before proceeding.
3. Remove the fryer door for easier access to the temperature probe. **D models:** Lift door up, disengage rod from lower door bracket, and remove door. **CFD/SCFD/FPD models:** Remove the top bracket and hinge, then remove door.
4. Disconnect the probe harness connector (arrow). Use a pin pusher to remove plug from probe wires (probe side only). Retain the plug for re-assembly on new probe.
5.
 - a. **1.5" drains:** Remove drain extension from elbow on drain valve. Set aside for reassembly. Drain extensions will vary in shape and size according to fryer model.
 - b. **3" drains:**
 - Remove the nuts holding the drain valve straps onto the drain tube studs.
 - Disconnect the Teflon tube at the back of the T-shaped center tube piece.
 - Disconnect any other components attached to the tubes.
 - Carefully remove the tubes by pulling down at an angle, straight out of the drain valves.
 - Set aside for reassembly.



Disconnect the two-pin probe harness connector (arrow). On units with 1.5" drains, remove the drain extension from the elbow on the drain valve.



On units with 3" drains, remove the nuts, Teflon tube (not pictured), clamp, boot, and drain tubes. (Step 5.B)

NOTE: Dean fryers may be equipped with either 1.5" or 3" drains. Follow the instructions appropriate for the drain type used.

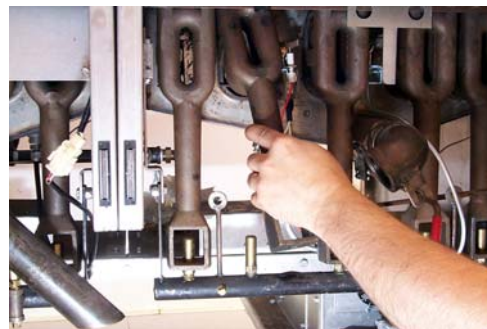
DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

1.7.3 Replacing the Temperature Probe; Computer-equipped Fryers (cont.)

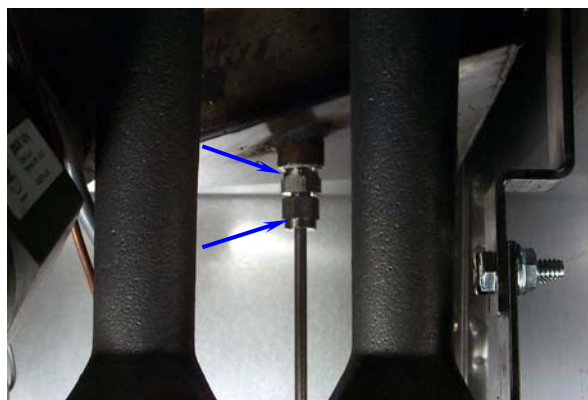
6. Remove the appropriate burners to gain access to the temperature probe. (See Steps 20-22 on page 1-27 for more details.)

NOTE: Ensure that the burners are placed in their original spots when putting them back into the fryer. (See page 1-28.)



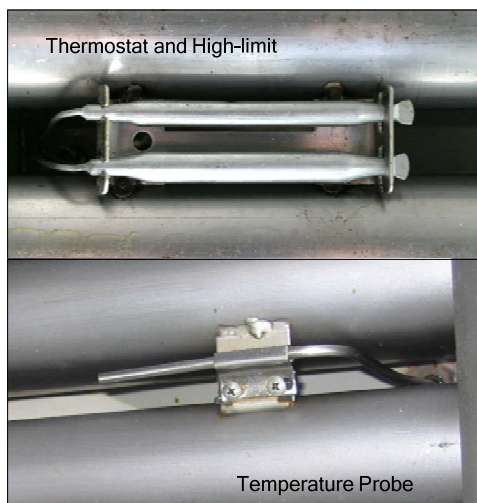
Remove burners to gain access to temperature probe.

7. Loosen and unscrew the compression nut and the pass-through nut completely from the frypot. Proceed to the next step before removing the probe from the frypot.



Loosen and unscrew completely the compression nut (bottom arrow), then the pass-through nut (top arrow).

8. Remove temperature probe mounting hardware. Some older pots may use a spring-bracket combination. Newer pots use mounting clips. Retain mounting hardware for installation of new temperature probe.



Newer pots have mounting clips.



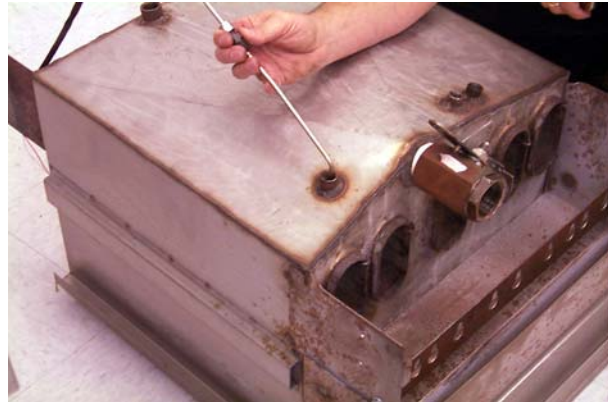
Older pots have spring-bracket combinations.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.7.3 Replacing the Temperature Probe; Computer-equipped Fryers (cont.)

9. The temperature probe can be removed through the bottom of the frypot as follows: Ensure the two-pin connector has been removed from the probe wiring harness (step 4, above). Remove the harness insulation. The probe can be pulled through the frypot from the bottom (complete step 7, above, prior to removing probe).
10. Carefully remove the probe from the frypot. As the probe is removed, tilt the probe at an angle to facilitate removal (curved probes only).

IMPORTANT: When installing new probe, ensure probe is positioned properly with the mounting hardware installed prior to tightening the compression nut. **Once tightened, the probe cannot be repositioned.**



First remove the mounting clips holding the probe in place. Retain mounting hardware for installation of new probe.

Installing the New Temperature Probe:

1. Feed the probe wire through the probe nipple from the top side of the frypot.
2. Loosely install the bladder nut.
3. Mount the probe into the mounting hardware.
4. Tighten the bladder nut.
5. Install the insulation and plug.

1.7.4 Replacing the High-limit Thermostat

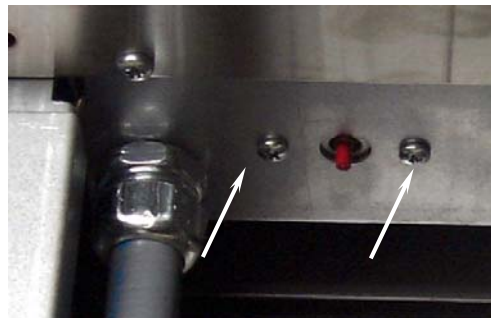
1. Turn fryer off and drain oil from the frypot. Allow the frypot to cool completely before proceeding.
2. Perform steps 1-4 in Section 1.7.1, *Replacing the Computer*.
3. Remove the fryer door for easier access to the temperature probe. **D models:** Lift door up, disengage rod from lower door bracket, and remove door. **CFD/SCFD/FPD models:** Remove the top bracket and hinge, then remove door.

DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

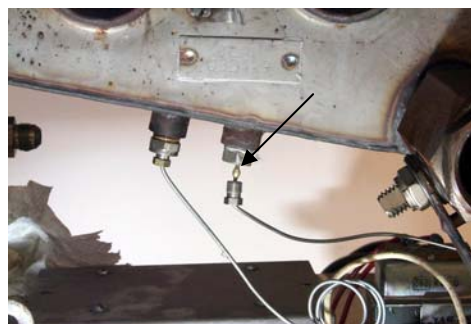
1.7.4 Replacing the High-limit Thermostat (cont.)

4. Remove two screws securing the high-limit mounting-bracket. Do not disconnect wires from high-limit at this time.



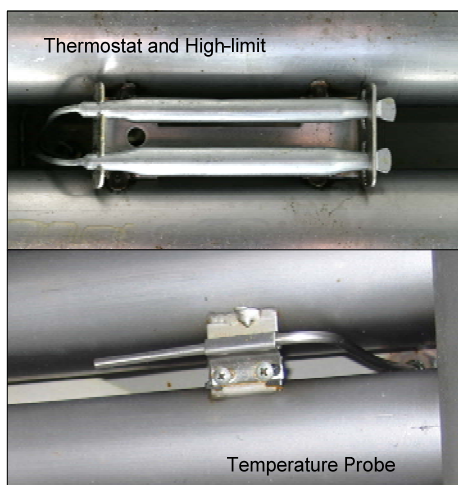
Remove screws (arrows) securing high-limit to fryer.

5. Loosen and completely unscrew the compression nut, then the pass-through nut on the frypot bottom. Proceed to the next step before removing high-limit from frypot.

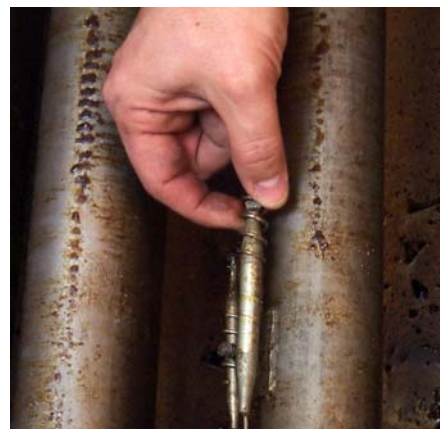


Compression nut unscrewed. Unscrew the pass-through nut (arrow)

6. Remove high-limit mounting hardware. Older pots may use a spring-bracket combination. Newer pots will use mounting clips. Retain mounting hardware for installation of new high-limit.



Newer pots have mounting clips.

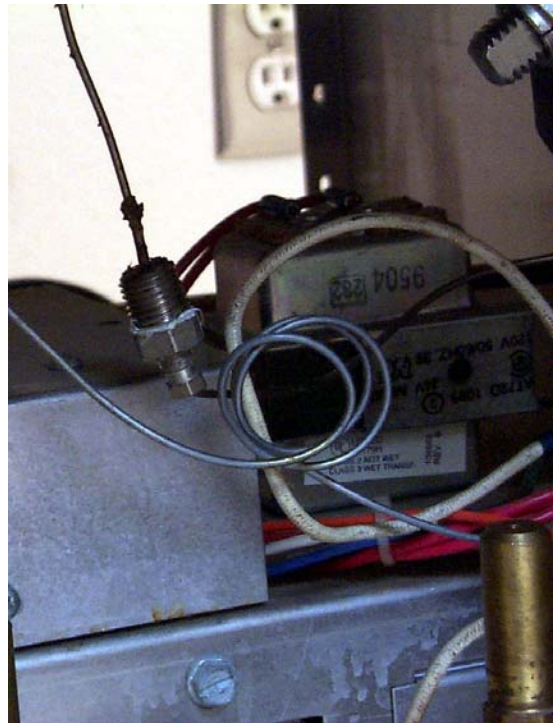


Older pots use spring-bracket combination.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

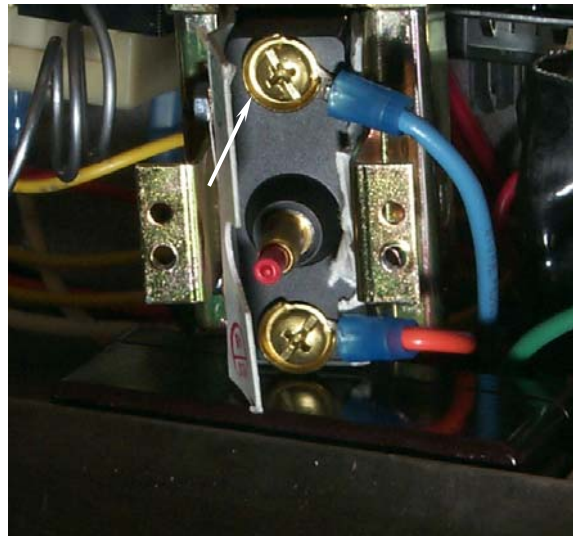
1.7.4 Replacing the High-limit Thermostat (cont.)

7. Carefully pull high-limit capillary tube and bulb out of the frypot from the bottom.



Remove high-limit capillary tube and bulb from the bottom of the frypot.

8. Mark and disconnect wires at the high-limit in the component box.

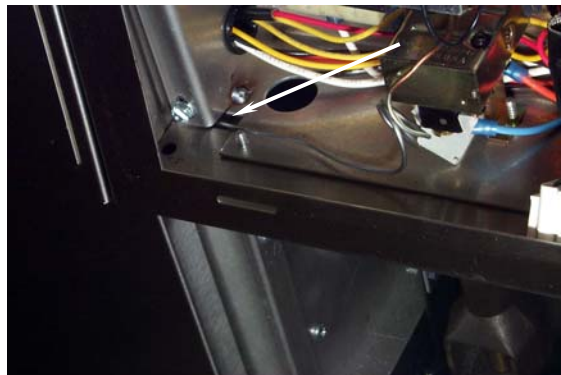


Mark and disconnect high-limit wiring (arrows). Reconnect wires to the same terminals on the replacement high-limit.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.7.4 Replacing the High-limit Thermostat (cont.)

9. Remove high-limit from fryer by pulling the capillary tube and bulb through the component box opening (arrow). This may require removal of the control panel frame.



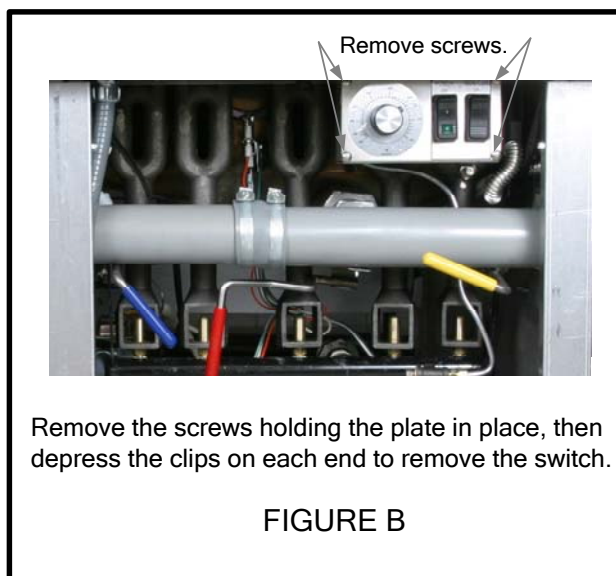
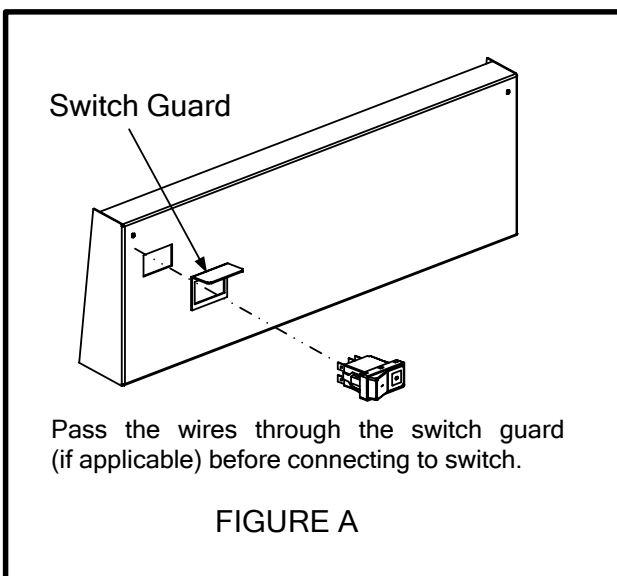
Component box opening (arrow).

10. Reverse the above steps for high-limit installation.

IMPORTANT: When installing new high-limit or backup thermostat, ensure the capillary tube and bulb are positioned properly with the mounting hardware installed prior to tightening the compression nut. **Once tightened, the capillary tube cannot be repositioned.**

1.7.5 Replacing Rocker Switches

1. Disconnect the fryer from the electrical supply.
2. **If the switches are located on front panel**, remove the screws securing panel to fryer. Do not allow the panel to hang on the switch wiring harness; use some type of support. (Figure A) **If the switches are located in a control box within the fryer**, remove the screws securing the switch panel to the control box. Do not allow the switch panel to hang from the switch wiring harness. (Figure B)

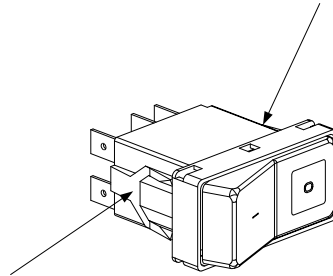


DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

1.7.5 Replacing Rocker Switches (cont.)

3. Depress the retaining clips (see illustration below) and push the switch out of the slot. If there is a switch-guard present, retain it for installation of the replacement switch.



Depress clips on each side to remove switch from control panel.

4. Remove wires one at a time from the switch being removed and connect to the replacement switch until all wires are transferred.
5. Reverse the above steps for reassembly.

1.7.6 Replacing the Gas Valve



DANGER

Drain the frypot or remove the handle from the drain valve before proceeding further.

1. Disconnect fryer from electrical and gas supplies.
2. Disconnect the wires from the gas valve terminal block, marking each wire to facilitate reconnections. For 120VAC gas valves, disconnect the black wire from the high-limit, then remove the bobtail connecting the white wire.
3. Remove the high-limit thermostat wire from the gas valve pilot coil (all but 120 VAC valves).
4. Remove the pilot gas line fitting from the gas valve.
5. Remove the pipe union collars to the left and right of the gas valve and remove the valve.
6. Remove the pipefitting from the old gas valve and install on the replacement valve, using Loctite PST567 or equivalent pipe thread sealant on threads. Do not apply sealant to the first two pipe threads. Doing so will clog and damage the gas valve.
7. Reverse steps 1-5 to install the replacement gas valve.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.7.7 Replacing the Pilot Assembly

1. Remove the pilot tubing from the bottom of the pilot assembly.
2. If the pilot is an electronic ignition pilot, disconnect the ignition cable and the sense wire.
3. Remove the two pilot mounting screws from the pilot mounting bracket and remove the pilot.
4. Reverse the procedure to replace the pilot assembly.

NOTE: The above procedure is applicable to standing pilot, electronic ignition, and trailing pilot assemblies.

1.7.8 Replacing the Frypot

1. Open fryer doors and remove filter pan (if applicable). Ensure computer and all power switches are off. Drain and dispose of or store oil from all frypots prior to moving fryer.



DANGER

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

2. Turn gas valve off, then turn gas off at supply valve or meter. Disconnect supply line from gas manifold at rear of fryer.

NOTE: If restraints are installed on the fryer, disconnect restraints prior to disconnecting the gas supply line.

3. Unplug fryer from electrical supply source.
4. Remove the fryer door for easier access to the temperature probe. *D models:* Lift door up, disengage rod from lower door bracket, and remove door. *CFD/SCFD/FPD models:* Remove the top bracket and hinge, then remove door.
5. Remove basket hanger from flue cap by lifting up and off of fryer. Some units may have a built-in flue deflector on the basket hanger. Units with basket lifts will require the removal of the lift arms prior to removing the basket hanger.



Removing the flue cap.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

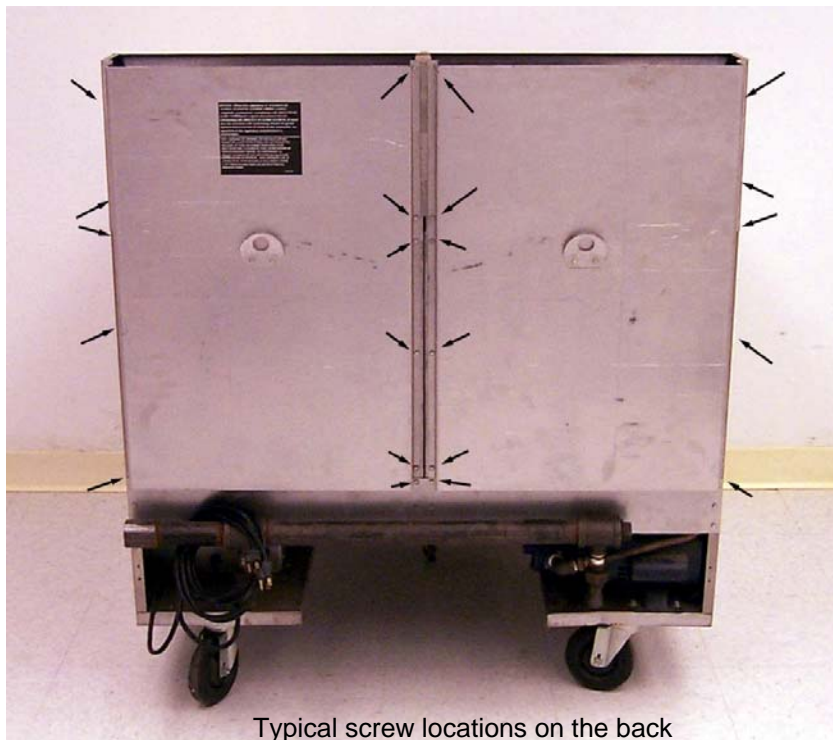
1.7.8 Replacing the Frypot (cont.)

- Carefully pry the capping strip off with a screwdriver or similar tool and set aside. Be careful not to bend the capping strip during removal.



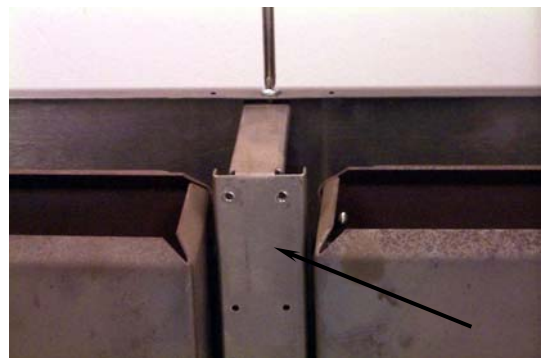
Removing capping strip.

- Locate all screws securing back panels. Screw location and orientation will vary according to fryer model.



Typical screw locations on the back

- Remove back panels on fryer. Retain screws for re-assembly.
- Remove screw securing brace (and back panel) to flue cap. Support brace with hand while removing screw to prevent brace from falling away. Remove brace and set aside for reassembly.



Removing brace holding back panel to flue cap.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.7.8 Replacing the Frypot (cont.)

10. Remove screws securing flue-cap braces to frypot (a nut-driver with an extension or long screwdriver is required). Use care not to drop the screws into the flues. If this happens, the screws can be retrieved when the flue is removed (Step 16). Use a screwdriver or similar tool to free flue cap from frypots. Remove flue cap by lifting up and off of fryer.



Removing flue cap.

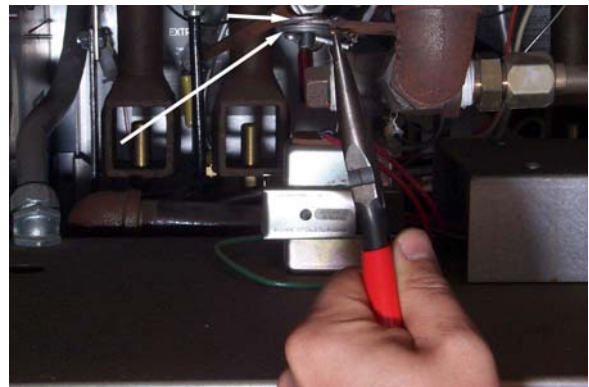
11. Remove gas manifold pipe for access to gas manifold shield by disconnecting at the unions. Ensure gas supply is shut off and supply line is disconnected prior to removing. Set gas manifold aside. Remove screws securing gas manifold shield. Remove shield to access oil-return plumbing components connected to the frypots.

NOTE: For units without built-in filtration skip the steps pertaining to removal and replacement of oil-return plumbing.



Removing gas manifold shield.

12. Remove cotter-pin from oil-return actuator rod. Observe washer placement prior to removing rod from the valve actuator (arrows). Disconnect actuator rod and remove washers. Set washers aside for later re-assembly.



Disconnecting oil-return linkage from valve.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.7.8 Replacing the Frypot (cont.)

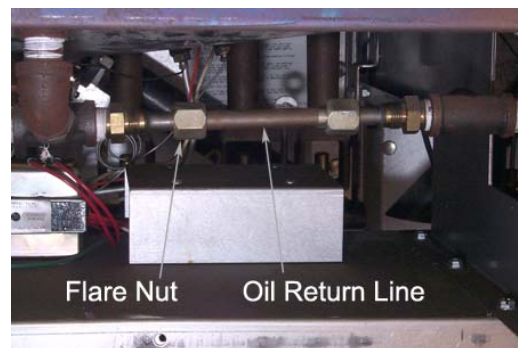
13. Remove steel line from oil-return valve and nipple by loosening flare fittings on both ends. Hold backup with an adjustable wrench when removing fittings.

(Prior to removal, absorbent cloth or paper towels should be placed under the oil line to catch any oil remaining in the lines.)



Holding backup while unscrewing flare nut on oil-return line.

14. Unscrew both flare fittings completely prior to line removal. Remove oil-return line and set aside (see Step 15 if line does not disengage easily).



Remove oil-return line after disconnecting flare nuts.

15. Turning the oil-return valve slightly outward with a pipe wrench or similar tool will facilitate return-line removal.



Turn the oil-return valve slightly outward to facilitate removal of the oil-return line.

16. Remove four bolts securing flue to the frypot being removed. Remove the flue by sliding back and away until clear of frypot. Retrieve any screws dropped into the flue during removal of the flue cap and frypot bracket.

17. Remove oil-return valve from frypot (see Step 15, above, for more information). Turn the valve assembly counter-clockwise to remove. If nipple remains in frypot, remove it also. Set aside for reassembly. (Skip to 19B if unit has 3" round drains.)

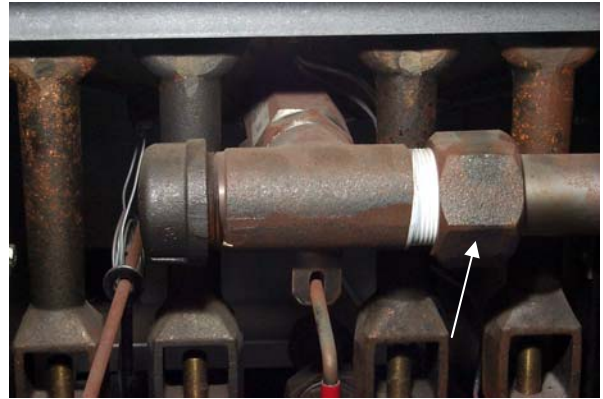


Removing bolts (arrows) securing flue to frypot.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.7.8 Replacing the Frypot (cont.)

18. If fryer is equipped with a front drain manifold, disconnect manifold at slip-nut fitting and remove.



On front drain manifolds, disconnect the slip-nut fitting (arrow) to remove.

19. a. *1.5" drains:*

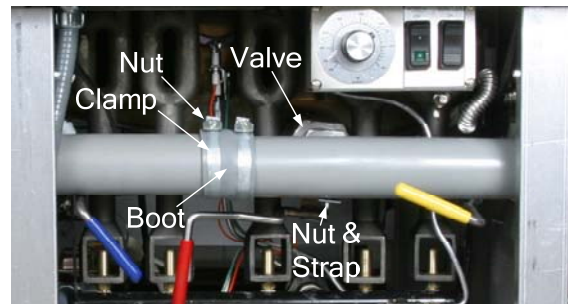
- Remove drain extension from elbow on drain valve. Drain extensions will vary in shape and size according to fryer model.
- Set aside for reassembly.



Removing 1.5" drain extension. (Step 19.A)

b. *3" drains:* Only tubes directly blocking the frypot being replaced need to be removed.

- Remove the nuts holding the drain valve straps onto the drain tube studs.
- Disconnect the Teflon tube at the back of the center dump tube piece.
- Disconnect any other components attached to the tubes.
- Remove the clamps and rubber boots holding the drain sections together by loosening the nuts on each clamp.
- Carefully remove the tubes by pulling down at an angle, straight out of the drain valves.
- Set aside for reassembly.



Removing 3" drain tubes. (Step 19.B)

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.7.8 Replacing the Frypot (cont.)

20. Remove the burner shield. Loosen burner bolts (two per burner) that secure burners to the burner support rail.

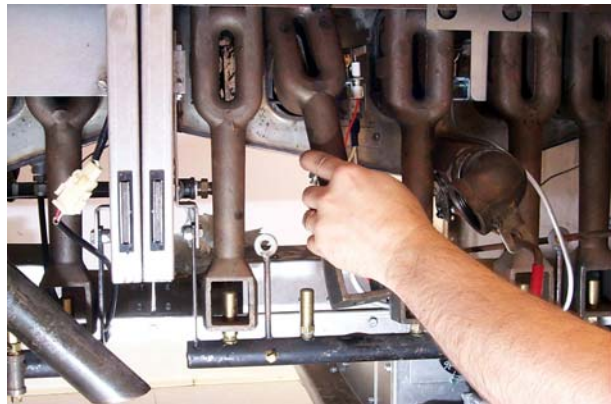
NOTE: On most fryers, do not remove bolts from burners. Some fryers have an additional bracket that warrants removal of the burner bolts.



Loosening burner bolts prior to burner removal.

21. Lift each burner upward to clear the orifice, and slant the top of the burner inward to clear the burner-brace keyholes.

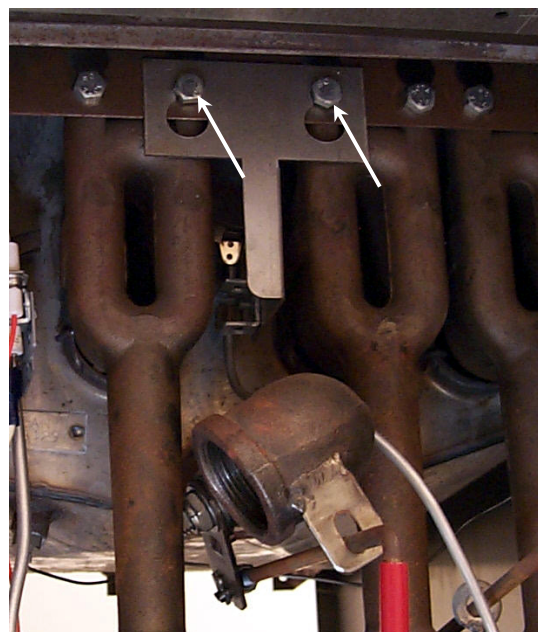
NOTE: On older Decathlon fryers, the right-center and center burners cannot be removed until the trailing pilot assembly is removed (explained in Step 22).



Removing burners from fryer.

22. On Decathlon fryers with a burner-mounted trailing pilot, loosen the bolts securing the pilot assembly to the burners and remove.

NOTE: Current production units do not require removal of trailing pilot when removing burners.



Old-style trailing pilot bracket is mounted on burners.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

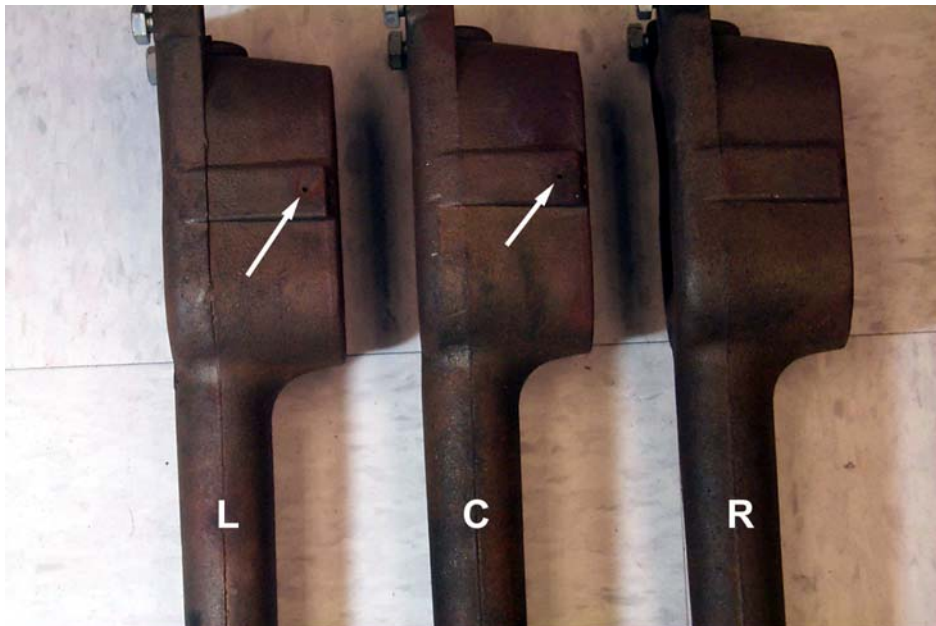
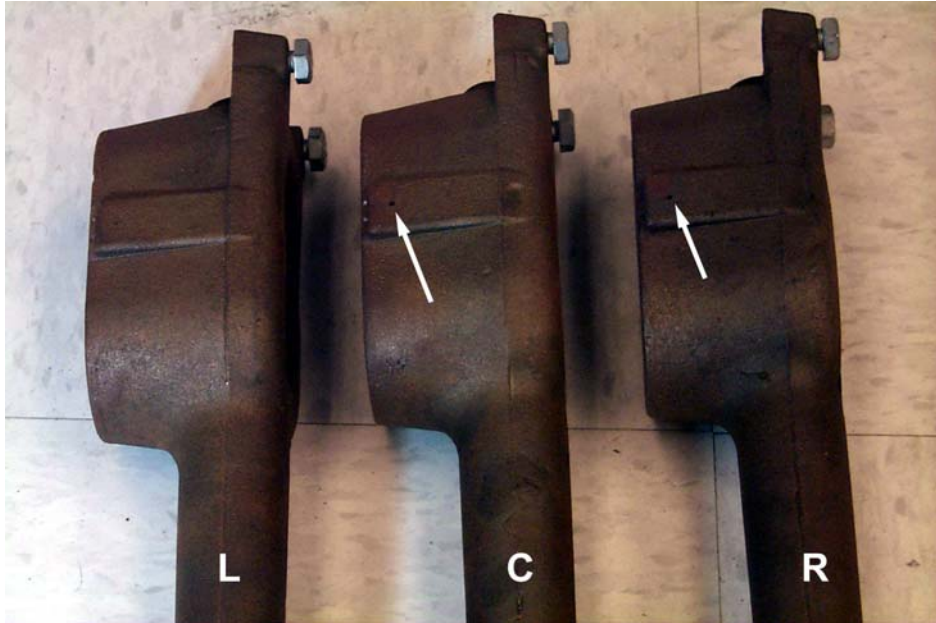
1.7.8 Replacing the Frypot (cont.)

Each burner is unique in the flame-transfer-hole configuration and must be reinstated correctly:

Left burners (L): Flame transfer hole is on the right side of the burner head.

Center burners (C): Flame transfer hole is on both sides of the burner head.

Right burners (R): Flame transfer hole is on the left side of the burner head.



DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.7.8 Replacing the Frypot (cont.)

23. Remove screw(s) securing the electronic or standing pilot bracket to the frypot bracket. Reposition ignitor assembly down and away from frypot. Use care not to bend, kink, or damage the electronic ignition lines and wiring.

NOTE: Remove the trailing pilot assembly on current production models as follows:

- a. Disconnect the pilot supply line from the trailing pilot valve on the burner manifold.
 - b. Remove the mounting screw(s) as described in Step 23, then remove trailing pilot.
24. Remove cotter pin from drain valve linkage, and disconnect actuator rod from drain valve actuator. (Not applicable on 3" drain models.)
 25. Remove elbow (tee-fitting on fryers equipped with front manifold) and nipple from the drain valve. (Not applicable on 3" drain models.)

26. If ball-retainer nut breaks loose and unscrews from the valve, remove it from the elbow nipple and re-install in valve. Use care not to damage the brass threads when removing from elbow nipple, or when re-installing into drain valve.



Removing electronic/standing pilot assembly.



Remove cotter pin (arrow), then disconnect the actuator rod.

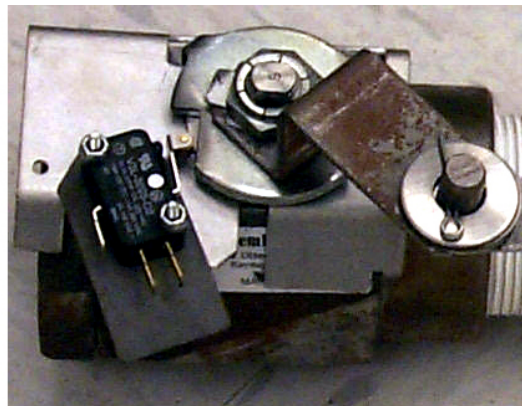
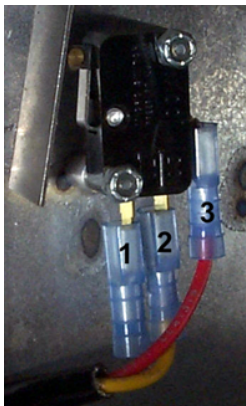


Ball retainer nut (arrow) on drain valve.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.7.8 Replacing the Frypot (cont.)

27. Remove the temperature probe from frypot. (See Section 1.7.3, *Replacing the Temperature Probe: Computer–equipped Fryers*, for specific instructions.)
28. Remove the high-limit and backup thermostats. Follow Steps 5-7, Section 1.7.4, *Replacing the High-limit Thermostat*, and Section 1.7.2, *Replacing Backup Thermostat*, (where applicable) from frypot.
29. If the fryer is equipped with drain-valve microswitches, mark the wires and microswitch terminals, then disconnect wires from the switch. Secure the wires to prevent damage when frypot is removed.



Left: Microswitch wires marked for removal (ensure microswitch terminals are marked the same as the wires removed). Right: Microswitch mounted to drain valve.

30. Remove bolts from brackets securing burner manifold to frypot. Leave the manifold in place.



Removing bolts (arrows) from burner manifold support brackets (both sides). Leave the burner manifold in place after removing bolts.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.7.8 Replacing the Frypot (cont.)

31. Using a sharp knife or box-cutter, cut the silicon seal between and in front of the two frypots (two-vat or more). Use care not to scratch stainless steel surfaces.



Cutting frypot seal prior to frypot removal.

32. Remove frypot from fryer by lifting up and out.



Lifting frypot from fryer.

33. Position the frypot upside down on a suitable work surface.

34. Record position of the valve stem in relation to the frypot prior to removing the drain valve. If equipped, remove microswitches and mounting hardware from valve prior to removal. Using a suitable wrench, remove the drain valve from the frypot. Use Loctite PST567 sealant when installing drain valve on replacement frypot.



Removing drain valve from frypot.

35. Reverse the above steps to install the replacement frypot.

DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

1.8 Troubleshooting and Problem Isolation

Because it is not feasible to include every issue that might occur, this section is intended to provide technicians with a general knowledge of the broad problem categories associated with this equipment and the probable causes of each. With this knowledge, the technician should be able to isolate and correct any problem encountered.

You are likely to encounter problems in these broad categories:

1. ignition failure,
2. improper temperature control,
3. improper filtration function,
4. basket lift malfunction.
5. improper burner function,
6. improper computer function,
7. frypot leakage, and

The probable causes of each category are discussed in the following sections. Troubleshooting guides are included in Section 1.9 to assist in identifying some of the more common problems.

1.8.1 Ignition Failure

Ignition failure occurs when the ignition module fails to sense a flame within the 60-second time delay period and locks out. Turn the fryer off, locate and fix the problem, then turn fryer back on to clear the module lock.

There are three primary reasons for ignition failure, listed in order of probability:

1. The gas and electrical power supplies,
2. The electronic circuits, or
3. The gas valve.

The Gas and Electrical Power Supplies

The main indicators that the gas or electrical power supply is the cause of ignition failure are as follows: an entire battery of fryers fails to light, and/or there are no indicator lights illuminated on the fryer experiencing ignition failure. Verify that the quick disconnect hose is properly connected, the fryer is plugged in, the main gas supply valve is open, and the circuit breaker for the fryer electrical supply is not tripped.

The Electronic Circuits

If gas and electrical power are supplied to the fryer, the next most likely cause of ignition failure is a problem in the 24 VAC circuit of fryers equipped with electronic ignition systems, or in the pilot system for those without electronic ignition. If the fryer is equipped with a SUFF/UFF filtration system, verify that the drain valve is fully closed. (The valve is equipped with a microswitch that must be closed for power to reach the gas valve. The valve handle can appear to be closed when the microswitch is open.) If the valve is fully closed, or the fryer does not have a filtration system, refer to the troubleshooting guides in this chapter.

DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

1.8.1 Ignition Failure (cont.)

The Gas Valve

If the problem is not in the 24 VAC circuit or pilot system, it is most likely in the gas valve. Before replacing the gas valve, refer to the troubleshooting guides in this chapter.

1.8.2 Improper Burner Function

In these instances, the burner ignites but exhibits abnormal characteristics, such as *popping*, incomplete lighting of the burner, fluctuating flame intensity, and flames “rolling” out of the fryer.

Popping indicates delayed ignition. In most cases, the main gas valve is opening, but the burner is not immediately lighting. When ignition does take place, excess gas ignites rapidly rather than smoothly.

The primary causes of popping are:

1. incorrect or fluctuating gas pressure,
2. misdirected or weak pilot flame,
3. clogged burner orifices,
4. clogged burner flame-transfer holes
5. clogged burners
6. inadequate make-up air,
7. heat damage to the controller or ignition module,
8. an out-of-adjustment ignitor or broken ignition wire,
9. a defective ignition module,
10. missing or misaligned burner deflector targets, or
11. clogged vent tube (causing incorrect gas pressure).

If popping occurs only during peak operating hours, the problem may be incorrect or fluctuating gas pressure. Verify that the incoming gas pressure (pressure to the gas valve) is in accordance with the appropriate CE or Non-CE requirements listed in the Installation and Operation manual that came with the fryer, and that the pressure remains constant throughout all hours of usage. Refer to *Adjusting Burner Manifold Pressure* in Section 1.4 if burner manifold pressure is suspected of being incorrect.

If popping is consistent during all hours of operation, verify that the pilot is properly positioned above the burner orifice and that the pilot pressure is correct. Correct pilot pressure is indicated by a flame 1 to 1½" long. Also verify that ignitor is properly adjusted (electrode tip 1/8" from pilot hood corner). Refer to Section 1.5 for pilot adjustment procedure.

Clogged burners, burner orifices, and burner flame transfer holes (see page 1-27 for reference) are also likely causes of delayed ignition. Clogged burners are indicated by uneven flame or partial flame on the burner face. Clogged orifices are indicated by no flame. Clogged burner flame transfer holes prevent the outermost burners from lighting immediately with the middle burners (four- and five-tube frypots).

Another cause of popping is an insufficient air supply or drafts that are blowing the pilot flame away from the burner. Check for "negative pressure" conditions in the kitchen area. If air is flowing into the kitchen area, this indicates that more air is being exhausted than is being replenished and the burners may be starved for air.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.8.2 Improper Burner Function (cont.)

If the fryer's gas and air supplies are okay, the problem most likely is with one of the electrical components. Examine the ignition module for signs of melting, distortion, or discoloration due to excessive heat build-up in the fryer. Also, examine the controller for the same conditions. This condition usually indicates improper flue performance. A melted or distorted ignition module is automatically suspect and should be replaced, but unless the condition causing excessive heat in the fryer is corrected, the problem is likely to recur.

Next, ensure the ignition wire is tightly connected at both ends and examine it for obvious signs of damage. Again, if damage is due to excessive heat in the fryer, that problem must also be corrected.

Check for proper operation by disconnecting the wire from the ignitor, inserting the tip of a screwdriver into the terminal, and holding it near the frame of the fryer as the power switch is placed in the "ON" position. A strong, blue spark should be generated for at least 60 seconds.



DANGER

MAKE SURE YOU ARE HOLDING THE INSULATED HANDLE OF THE SCREWDRIVER AND NOT THE BLADE. THE SPARKING CHARGE IS APPROXIMATELY 25,000 VOLTS.

Ensure the gap setting of the ignitor is correct (electrode tip 1/8" from pilot hood corner).

1.8.2 Improper Burner Function (cont.)

Burners lighting on the left side only may be caused by a trailing pilot problem (four- and five-tube frypots) or improper burner manifold pressure.

Fluctuating flame intensity is normally caused by either improper or fluctuating incoming gas pressure, but may also be the result of variations in the kitchen atmosphere. Verify incoming gas pressure in the same way as for "popping," discussed in the preceding paragraphs. Variations in the kitchen atmosphere are usually caused by air conditioning and/or ventilation systems starting and stopping during the day. As air conditioning/ventilation systems start and stop, the pressure in the kitchen may change from positive or neutral to negative, or vice versa. Changes in airflow patterns may affect flame intensity.

Flames "rolling" out of the fryer are usually an indication of negative pressure in the kitchen. Air is being sucked out of the fryer enclosure and the flames are literally following the air. If negative pressure is not the cause, check for high burner-manifold gas pressure in accordance with the procedures in Section 1.4. An obstructed flue, which prevents the fryer from properly exhausting, may also be the cause.

Excessively noisy burners, especially with *flames visible above the flue opening*, may indicate that the burner gas pressure is too high, the tube diffusers are defective or burned out, or it may simply be that the gas valve vent-tube is blocked (if applicable). If the gas pressure is correct, the tube diffusers are intact and in good condition, and the vent-tube is unobstructed (if applicable), the gas valve regulator is probably defective.

DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

1.8.3 Improper Temperature Control

Temperature control, including the melt cycle, is a function of several interrelated components, each of which must operate correctly. The principal component is the temperature probe. Depending upon the specific configuration of the fryer, other components may include the interface board, the computer/controller itself, and the ignition module. Improper temperature control problems can be categorized into melt cycle problems and failure to control at setpoint.

In fryers equipped with a Thermatron/optional backup operating-thermostat, the problem will be with the thermostats themselves. Possible causes are that the thermostats are out of calibration or defective. Refer to Section 1.6 for instructions on calibrating the thermostats.

In fryers equipped with computers, the problem may be with the temperature probe, the interface board, or the computer. Refer to the troubleshooting guides in this chapter.

1.8.4 Improper Computer Function

Sensitivity or "Stretch Time." Sensitivity—or stretch time—is a programmable feature that increases the cook time countdown based on variations in the oil temperature from the setpoint (e.g., when cold product is dropped into the oil, causing the oil temperature to drop). The sensitivity for each product button has 10 settings (0 through 9). A "0" sensitivity setting will disable the feature (no change in cooking time), while a nine will provide the highest sensitivity or the most change. The correct sensitivity for any product is based on the product type, its density, the setpoint temperature, and the customer's own requirements.

Common Computer Complaints. Most problems concerning computers have to do with programming them. There are four common complaints. The complaints, their causes, and corrective actions are as follows:

- 1. Fryer constantly displays "HI".**
Cause: Setpoint incorrect or missing.
Corrective Action: Press 1 6 5 0, enter the correct setpoint using keypad, then press and then this to lock in the setpoint.
- 2. Temperature is displayed in Celsius.**
Cause: Computer is programmed to display in Celsius.
Corrective Action: Press 1 6 5 8.
- 3. Temperature is constantly displayed.**
Cause: Computer is programmed for constant temperature display.
Corrective Action: Press 1 6 5 L.
- 4. Computer times down too slowly or too quickly.**
Cause: Computer is compensating for oil temperature via the sensitivity setting.
Corrective Action: Reprogram sensitivity setting for each product in accordance with programming instructions in the Compu-Fry Operation and Programming manual, P/N 819-5865.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.8.5 Improper Filtration Function

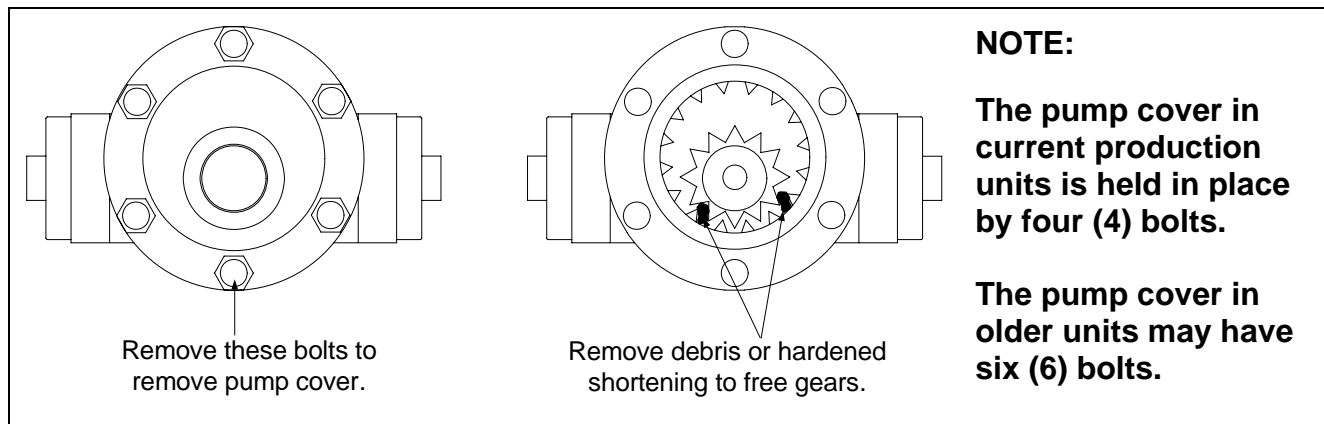
The majority of filtration problems arise from operator error. One of the most common errors is placing the filter paper on the bottom of the filter pan rather than over the filter screen. Anytime the pump is running, but no oil is being filtered, check the installation and size of the filter paper. Verify that the O-ring on the slip-connection is in good condition. A missing or worn O-ring allows the pump to suck air, decreasing its efficiency.

If the pump motor overheats, the thermal overload will trip and the motor will not start until it is reset. If the pump motor does not start, press the red reset switch located on the rear of the motor. Also, reset the filter circuit breaker located under the fryer control panel. If the pump then starts, something caused the motor to overheat. The pump most likely overheated for one of the following reasons:

- Shortening was solidified in the pan or filter lines.
- Multiple frypots were filtered one-after-another. Allow the pump to cool for 30 minutes before using again.
- The operator attempted to filter unheated oil. Cold oil is thick and will cause the pump motor to work harder and overheat.

If the motor runs, but the pump does not, the pump is blocked. Incorrectly sized or installed paper allows food particles and sediment to pass through the filter pan and into the pump. When sediment enters the pump, the gears bind and cause the motor to overheat, tripping the thermal overload. Solidified shortening in the pump will produce the same result. A pump seized by debris or hard shortening must be disassembled, cleaned, and reassembled in the following manner:

1. Disconnect power to the filter system.
2. Remove the front cover of the pump to access the gears inside, if the pump is accessible while still inside the cabinet. If the front cover is not accessible, the pump must be removed from the pump motor (disconnect input/output plumbing from the pump prior to removing it). Remove three setscrews to disengage the pump from the motor.
3. Prior to reassembly, the inside housing must be clean and free of any sediment or debris. If not, the gears will bind again after reassembly.



DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

1.8.5 Improper Filtration Function (cont.)

Incorrectly sized or installed paper will allow food particles and sediment to pass through and clog the suction tube on the bottom of the filter carriage. Particles large enough to block the suction tube may indicate that the crumb tray is not being used.

Pan blockage can also occur if shortening is left in the pan and allowed to solidify. Heater strips (if equipped) on the oil return plumbing are designed to prevent solidification of shortening left in the plumbing. Heater strips will not melt or prevent solidification of shortening in the pan.

Remove blockage by forcing it out with an auger or drain snake. DO NOT use compressed air or other pressurized gases to force out the blockage.

The SUFF/UFF filtration systems use microswitches attached to handles for each vat. They are wired in parallel and provide the 24 VAC required to activate the pump relay coil when the handles are moved to the ON position. The activated pump relay coil pulls the pump motor switch in, supplying power to the pump motor.

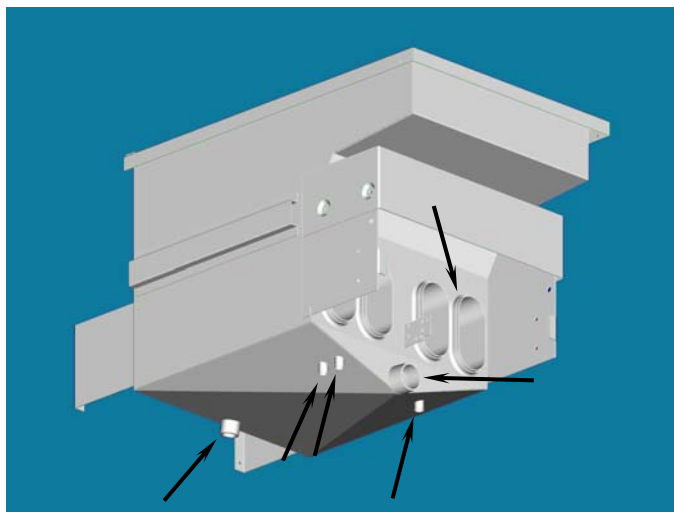
Filter systems equipped with oil-return heaters are wired into the 120 VAC source, and remain energized as long as the unit is plugged in.

1.8.6 Frypot Leakage

Frypot leaks are almost always due to improperly sealed high-limit, thermostats/temperature probe and drain fittings. When installed or replaced, each of these components must be sealed with Loctite PST567 sealant or equivalent to prevent leakage. In very rare cases, a leak may develop along one of the welded edges of the frypot, or where the tube is welded to the frypot. When this occurs, the frypot must be replaced.

If the sides or ends of the frypot are coated with oil, the most likely cause is spillage over the top of the frypot rather than leakage.

Frypot locations (indicated by arrows) where potential leaks could occur.



DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

1.8.7 Improper Basket Lift Function

Bell-Crank Basket Lifts

Most Decathlon Series gas fryers are equipped with a **bell-crank style basket lift**. A cam and a bell crank are connected to the basket lift arm by a flat metal link. The cam is attached to a drive motor. The motor rotates the cam, raising or lowering the lift arm linked to the bell crank. A roller-activated microswitch is used to limit travel. When the roller in the microswitch is in contact with the cam, the motor is energized. As the cam rotates, the roller loses contact with the cam and the motor power circuit is broken, de-energizing the motor.

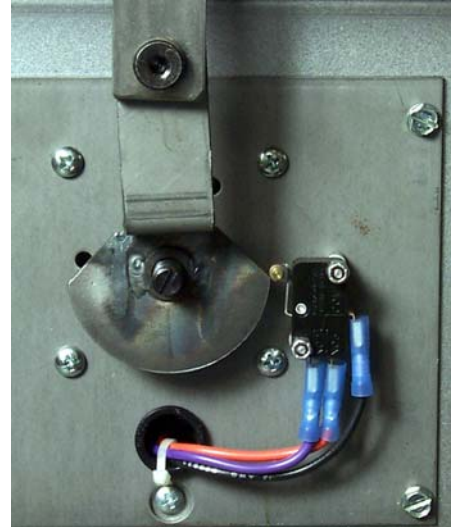
Timing circuitry in the controller initiates and stops basket lift operation. When the product button is pressed, the timing circuitry activates a coil in the basket lift relay to supply power to the motor. The microswitch stops the motor at the lift's lower travel limit and the switch contacts are reversed. At the end of the programmed cooking time, the timing circuit activates the coil once more and the lift rises until the microswitch again loses contact with the cam, opening the motor power circuit and stopping the motor.

Problems with the bell-crank basket lift system can be grouped into two categories:

- binds and jams or
- motor and gear wear.

Binds and jams. Noisy, jerky, or erratic lift movement is usually due to lack of lubrication. Apply a light coat of Lubriplate or similar lightweight white grease to the connection points to correct the problem.

Motor Problems. If power is reaching the motor but the motor fails to run, the motor is burned out and must be replaced.



Back view of bell-crank basket lift.



Bell-crank basket-lift arms.

DECATHLON SERIES GAS FRYERS

CHAPTER 1: SERVICE PROCEDURES

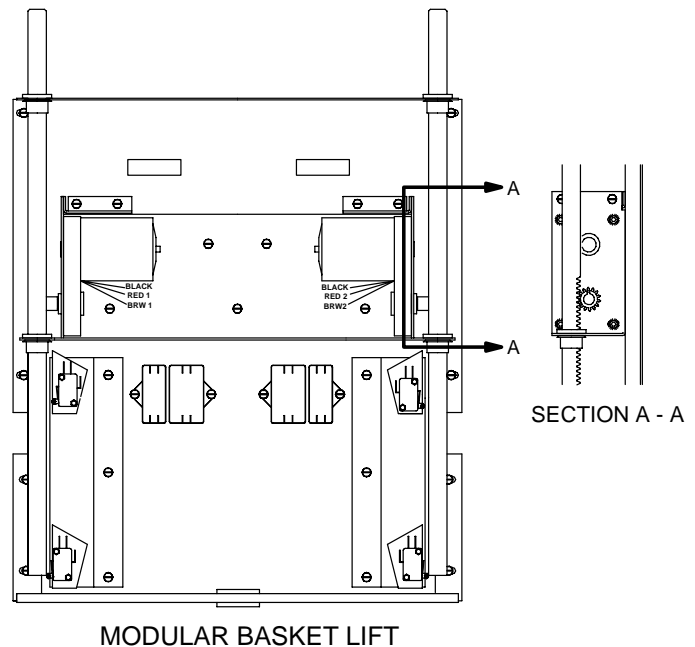
1.8.7 Improper Basket Lift Function

Modular Basket Lifts

Older Decathlon Series fryers may be equipped with **modular basket lifts**. The modular basket lift consists of a notched rod to which the basket lift arm is attached, a reversible-drive gear motor, and a pair of roller-activated microswitches. The gear motor engages the notches in the rod, moving it up or down. Microswitches at the upper and lower limits of movement stop the motor when the basket is in the full up or full down position. A manual (push-button) controller or computer controls voltage to the system.

Problems with the modular basket lift system can be grouped into three categories:

- binds and jams;
- motor and gear wear;
- electronics failure.



Binds and jams. Noisy, jerky, or erratic movement of the lifts is usually due to lack of lubrication of the rods and their bushings. Apply a light coat of Lubriplate or similar lightweight white grease to the rod and bushings to correct the problem.

Another possible cause of binding is improper positioning of the motor, which prevents the gear from correctly engaging the teeth in the rod. To correct the problem, loosen the screws that hold the motor in place and move it forward or backward until the rod has just enough slack to be rotated slightly.

Motor and gear wear. The most likely problem is erratic motion of the lift due to a worn drive gear. Failure to keep the lift rod and bushings properly lubricated will cause unnecessary wear of the gear. The problem is corrected by replacing the worn gear.

If the lift cycles correctly but fails to remain in the up position, the problem is a failed motor brake. A failed motor brake cannot be repaired and requires replacement of the motor itself. If power is reaching the motor but the motor fails to run, the motor is burned out and must be replaced.

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.8.7 Improper Basket Lift Function (cont.)

Electronics failure. This category encompasses problems with the relays, microswitches, capacitors, resistors, interface board, wiring, and controls.

Troubleshooting the electronics of the modular basket lift is simply a process of verifying current flow through the components up to and including the motor. Using a multimeter set to the 250 VAC range, check the connections on both sides of the component for the presence of 120 VAC. The simplified wiring diagrams on the preceding pages identify the components and wiring connection points.

1.9 Troubleshooting Guides

The following troubleshooting guides are intended to assist service technicians in quickly isolating the probable causes of equipment malfunctions by following a logical, step-by-step process.

| PROBLEM | PROBABLE CAUSES | CORRECTIVE ACTION |
|---|---|---|
| Burner will not ignite. Light in ON/OFF switch is not illuminated. | A. ON/OFF switch is off. | A. Turn ON/OFF switch on. |
| ON/OFF switch is on, but the switch light is not illuminated. | A. No voltage at switch. | A. Ensure line voltage is present at the switch. |
| ON/OFF switch is on and the switch light is illuminated, but there is no output to gas valve. | A. Drain microswitch circuit (filter-equipped units) is open. | A. Ensure drain valve is fully closed and microswitch is functioning. Replace microswitch if defective. |
| | B. Voltage is present at ON/OFF switch, but continuity of the switch in ON position is not "0." | B. ON/OFF switch is defective. Replace switch with a known working switch. |
| | C. Continuity of thermostat is not "0" (oil temperature is at least 15°F below electronic/ operating thermostat setting). | C. Thermostat(s) is/are defective. Replace defective thermostat with a known working thermostat. |
| | D. Gas valve is suspect. | D. Go to "No burner flame" section. |

**DECATHLON SERIES GAS FRYERS
CHAPTER 1: SERVICE PROCEDURES**

1.9 Troubleshooting Guides (cont.)

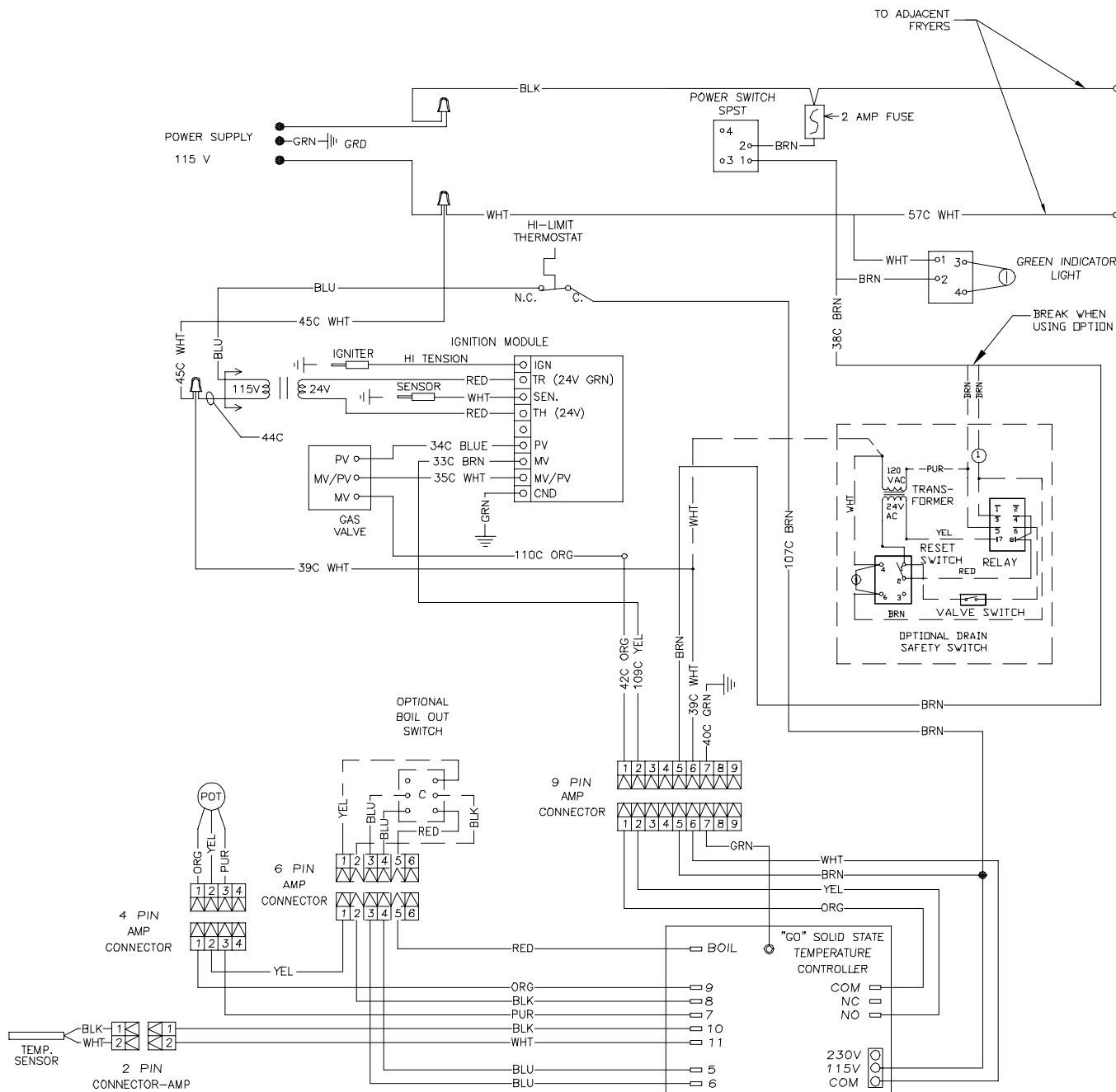
| | | |
|---|---|--|
| No burner flame. | A. Pilot does not stay lit (fryer is on and thermopile output is approximately 400 millivolts and/or thermocouple is approximately 25 millivolts. | A. Check high-limit switch. Switch continuity should be "0." If not, high-limit switch is defective. Replace high-limit switch. |
| | B. Pilot does not stay lit (fryer is on and thermopile output is not approximately 400 millivolts or thermocouple output is not 25 millivolts. | B. Inspect thermocouple (units without interface board) or thermopile (units with interface board) and replace if defective. |
| | C. Pilot stays lit, and the high-limit and thermopile/thermocouple are known working, but burners fail to light. | C. Inspect gas valve and replace if defective. |
| | D. Gas valve is known to be good, but there is not 24 VAC (120VAC on systems so equipped) at the gas valve terminals. | D. Inspect electronic/operating thermostat sensor (while still in frypot) for damage. Replace if bent, dented, or cracked. Inspect leads for fraying, burning, breaks, and/or kinks. If found, remove and replace thermostat(s). Remove leads from terminal block, allow oil to cool 15°F (8°C) below thermostat setting, and check continuity. If continuity is not "0," then thermostat has failed. Replace thermostat(s). |
| | E. Continuity from terminal block to gas valve electronic/operating thermostat wire is not "0." | E. Inspect wiring for breaks or shorts and repair if necessary. |
| Fluctuating or erratic lighting of burner flame. | A. Incoming gas supply pressures are not within range [Natural- 6-14" W.C. (1.49-3.49 kPa); Propane- 11-14" W.C. (2.74-3.49 kPa)] | A. Inspect gas supply to fryer. Repair and/or replace faulty components (defective supply shut-off valves, incorrect piping size, etc.) |
| | B. Air in gas supply lines (new installation). | B. Allow unit to cycle on and off for approximately 30 minutes to force air from gas manifold and lines. |
| Electronic/operating thermostat will not adjust to correct temperature. | A. Electronic/operating thermostat is out of calibration. | A. Calibrate electronic/operating thermostat. Replace if calibration is not possible. |

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

1.10 Wiring Diagrams

Note: The diagrams in this section depict wiring as of the date of manual publication. It may not reflect design changes made to the equipment after publication. Refer to the wiring diagram affixed to the unit when actually troubleshooting this equipment.

Decathlon, Electronic Ignition, Current Configuration (Right/left sides are the same after Oct. 2005.)

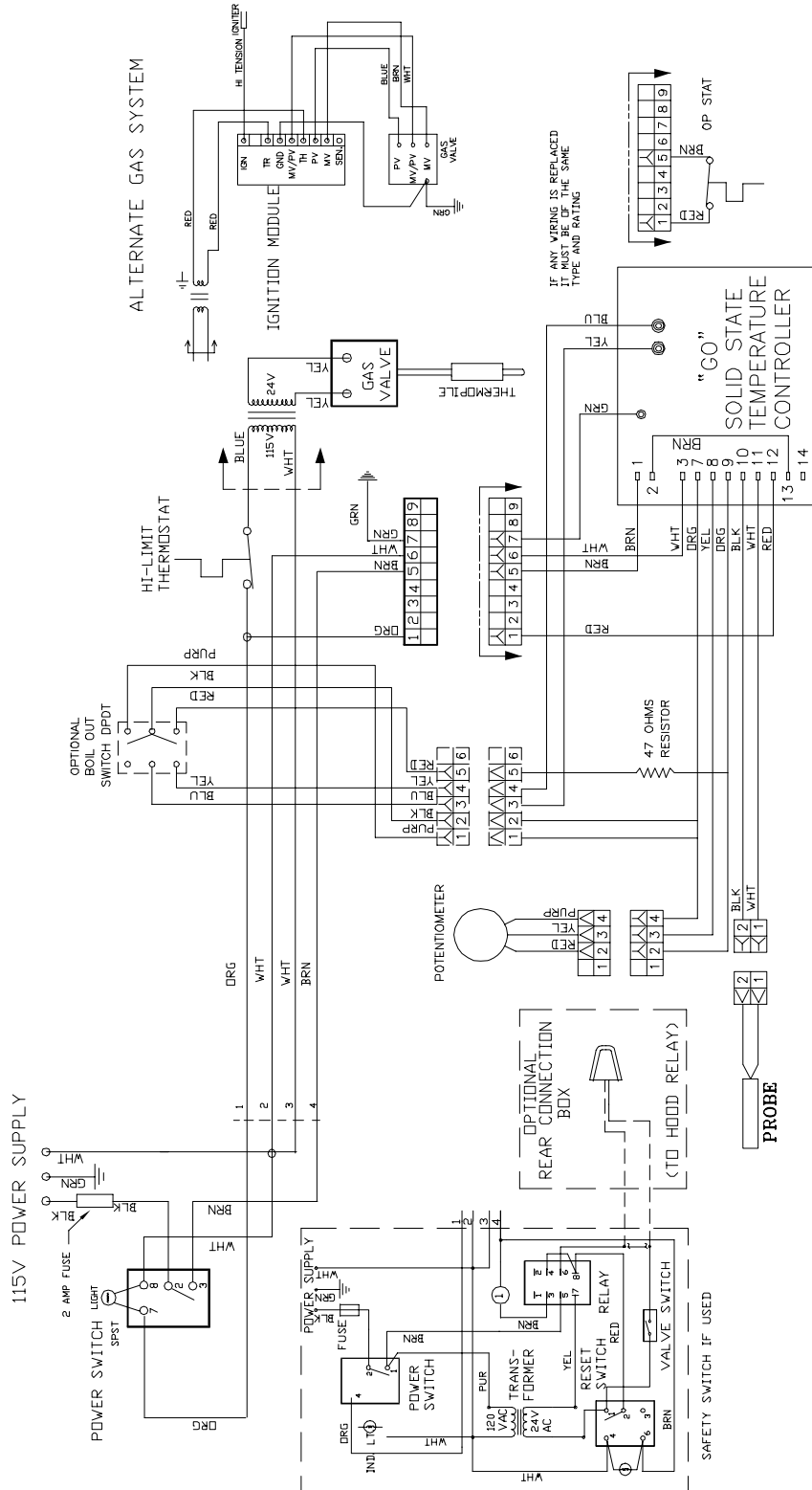


805-1605A

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

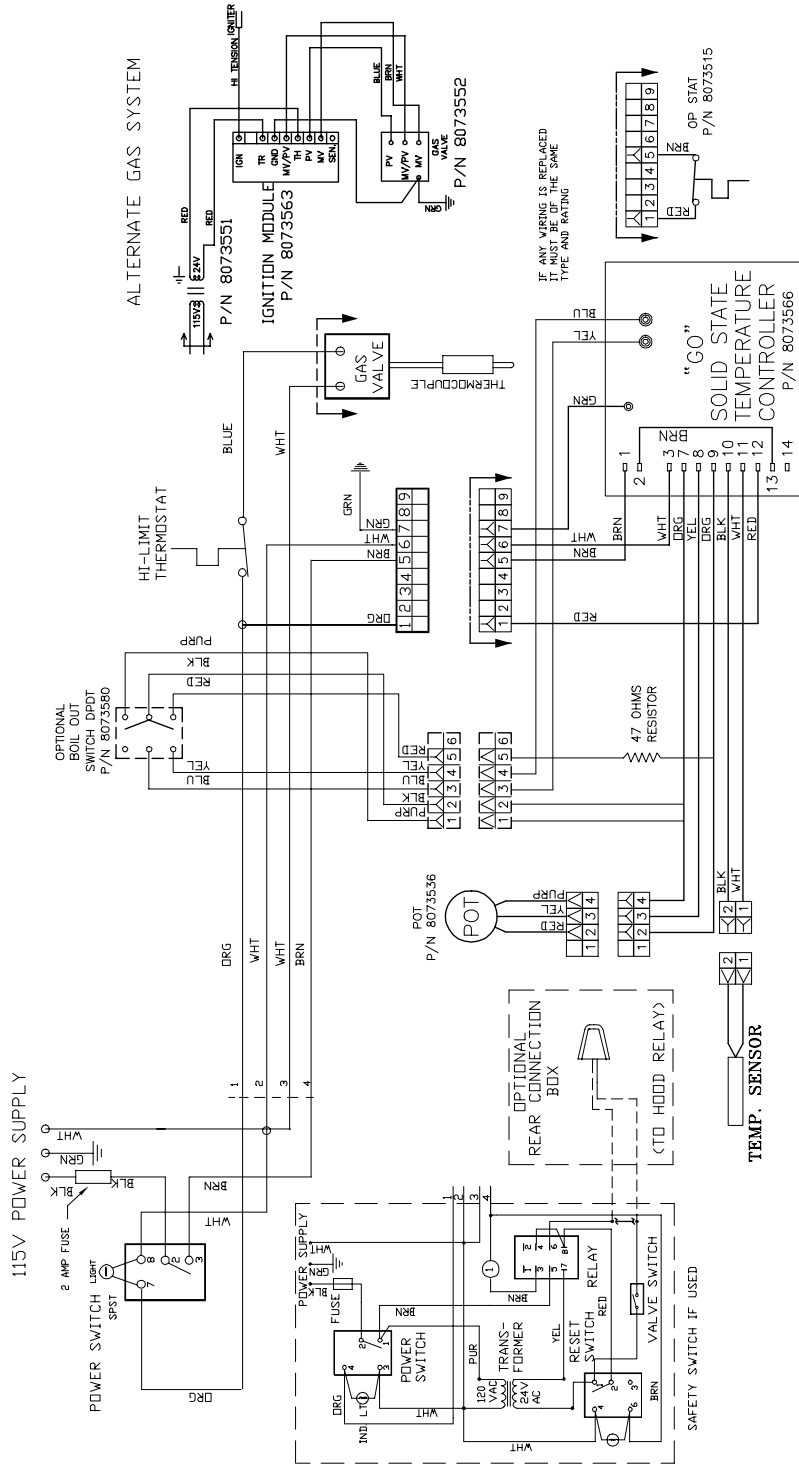
Thermatron, 24V

8051561A



DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

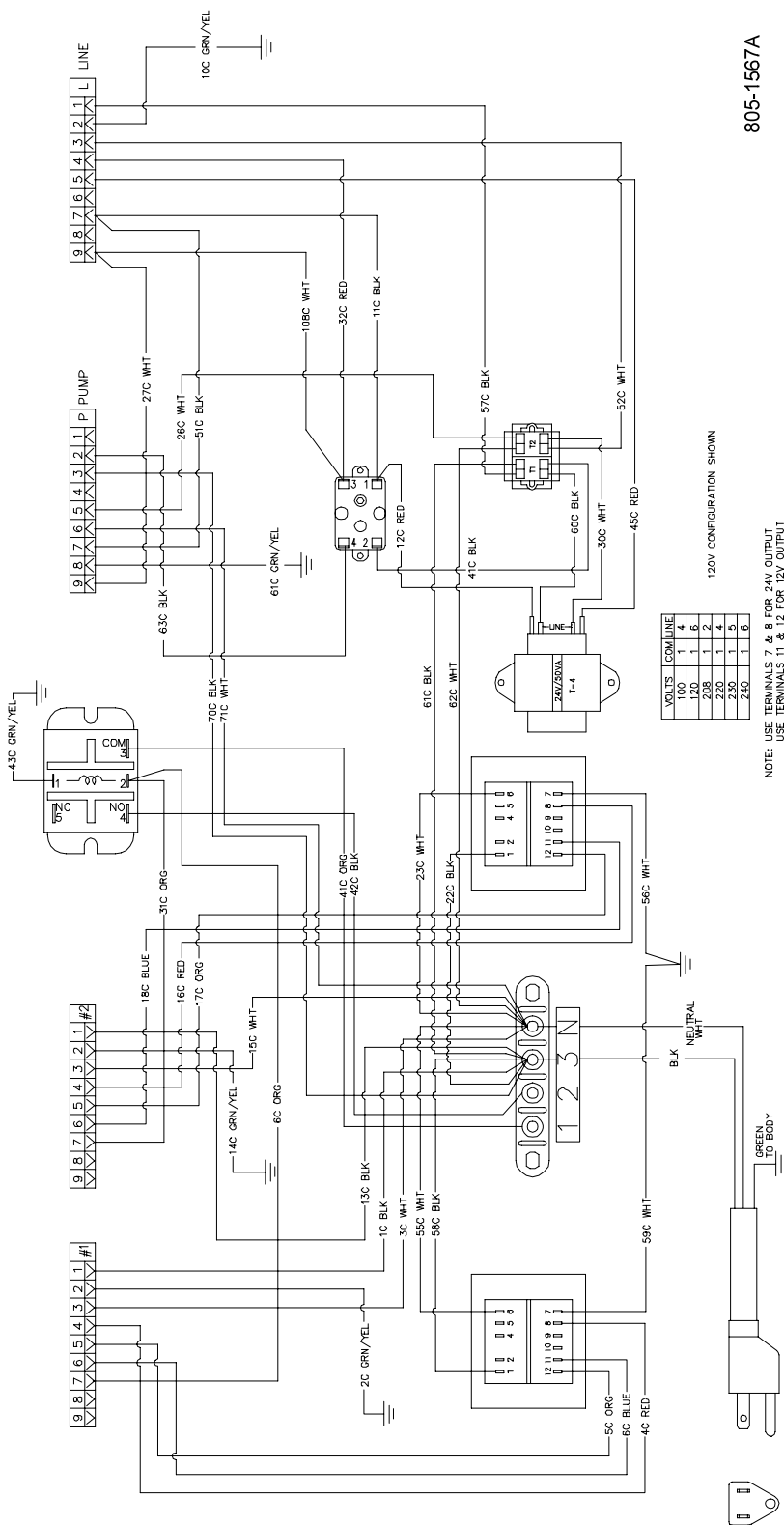
Theratron, 120V



8051451A

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

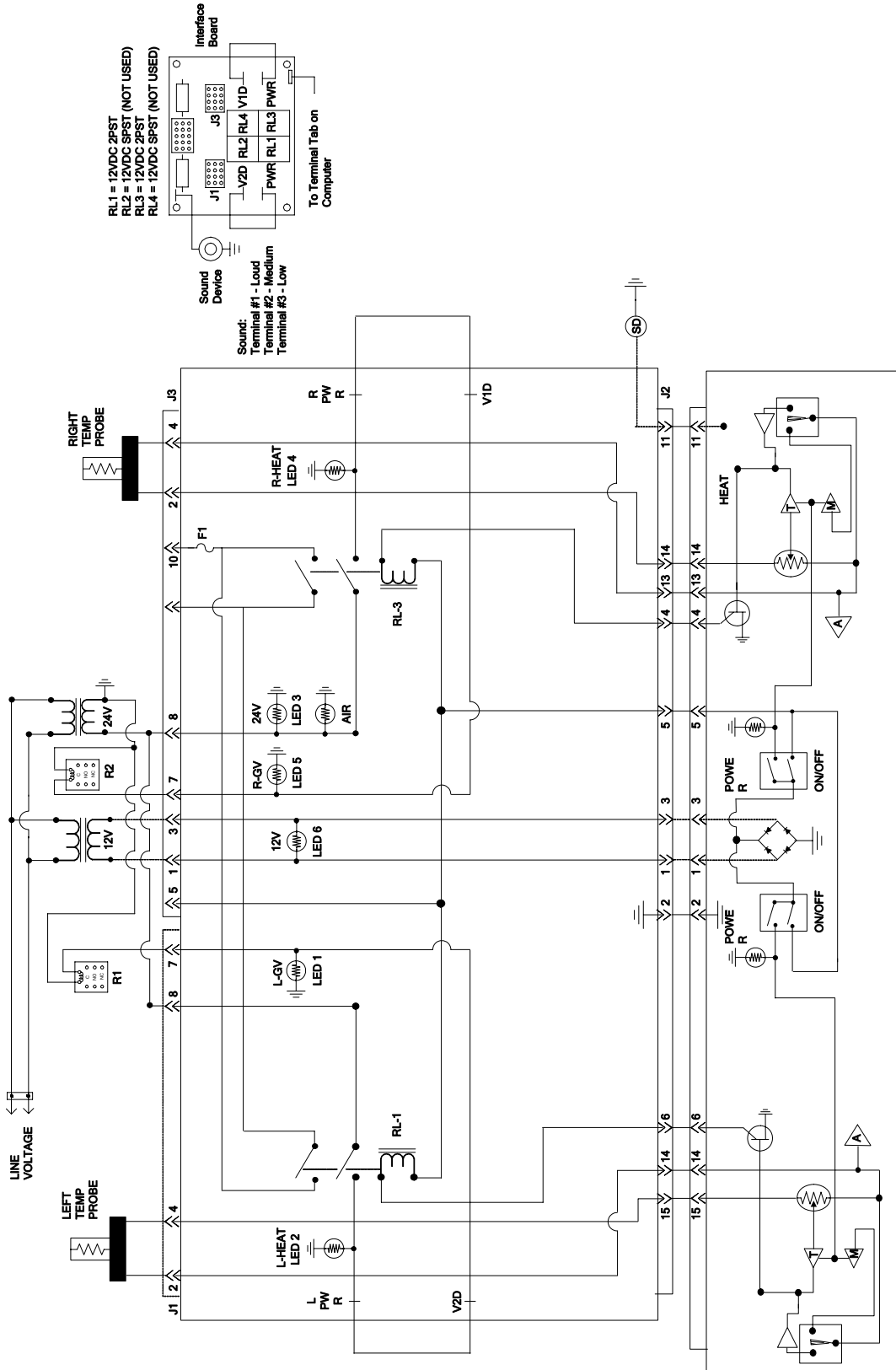
Transformer Box



805-1567A

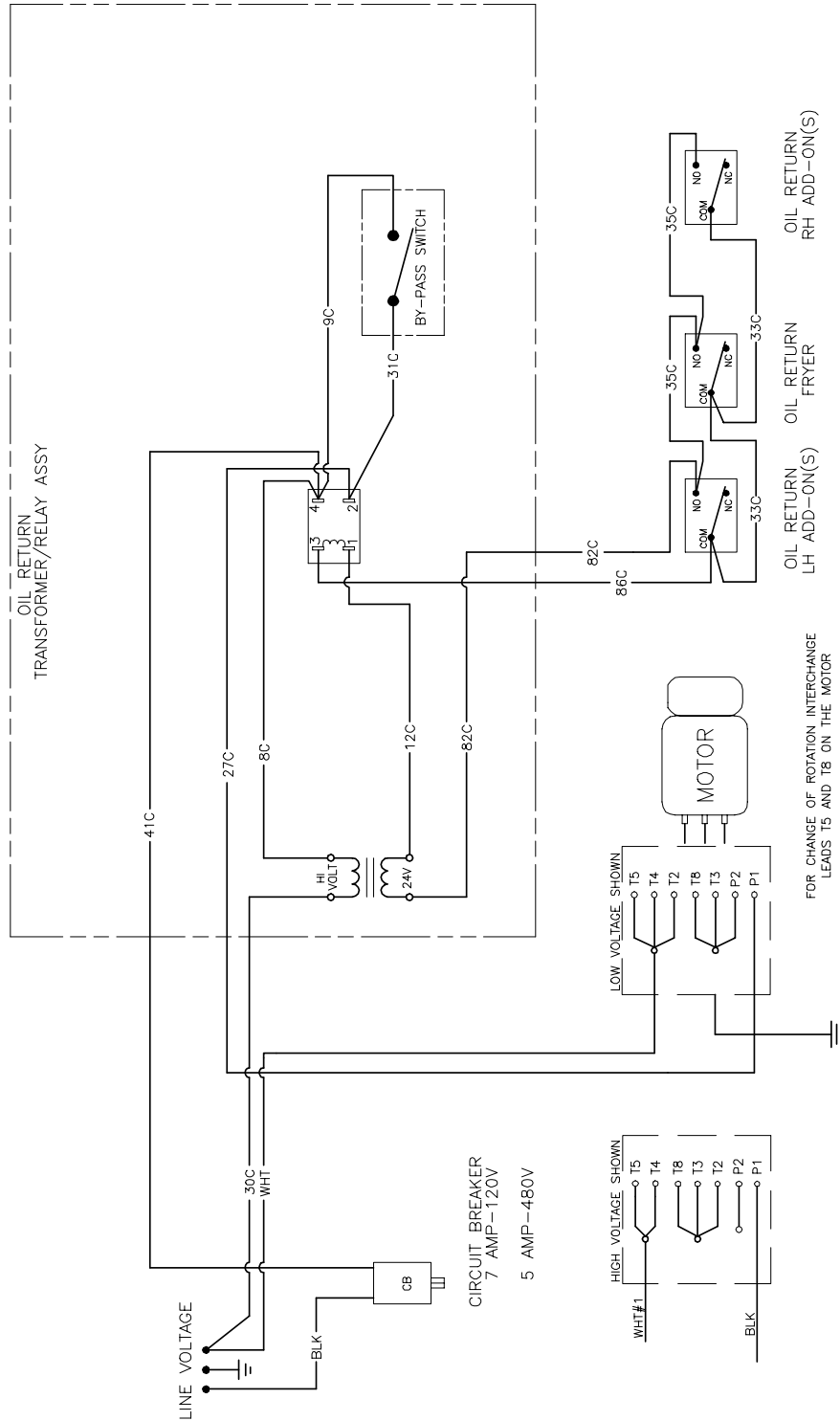
DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

Decathlon Interface Board



DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

Dean Oil Return Wiring

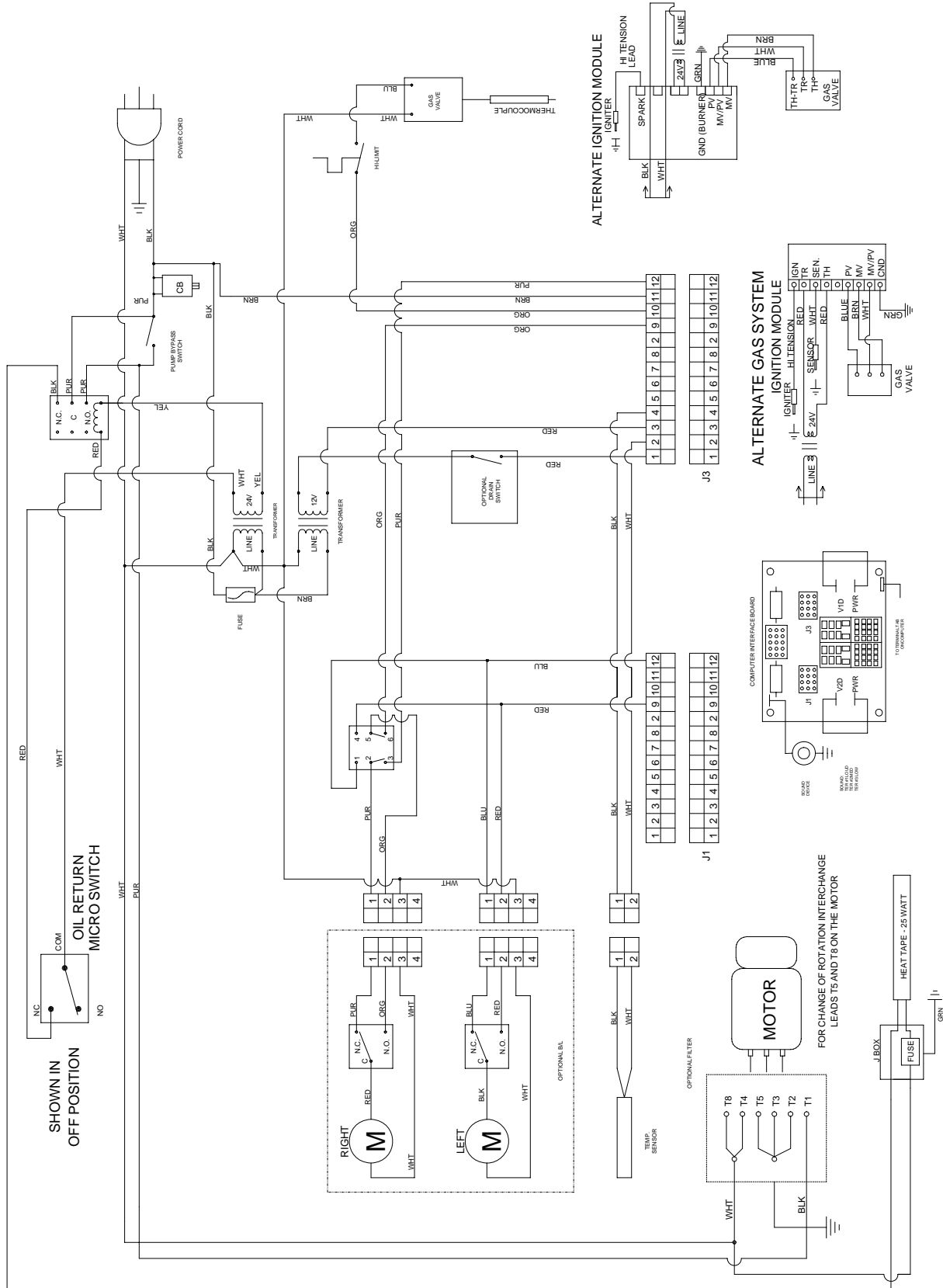


MICRO SWITCH
SHOWN IN
OFF POSITION

8051428C

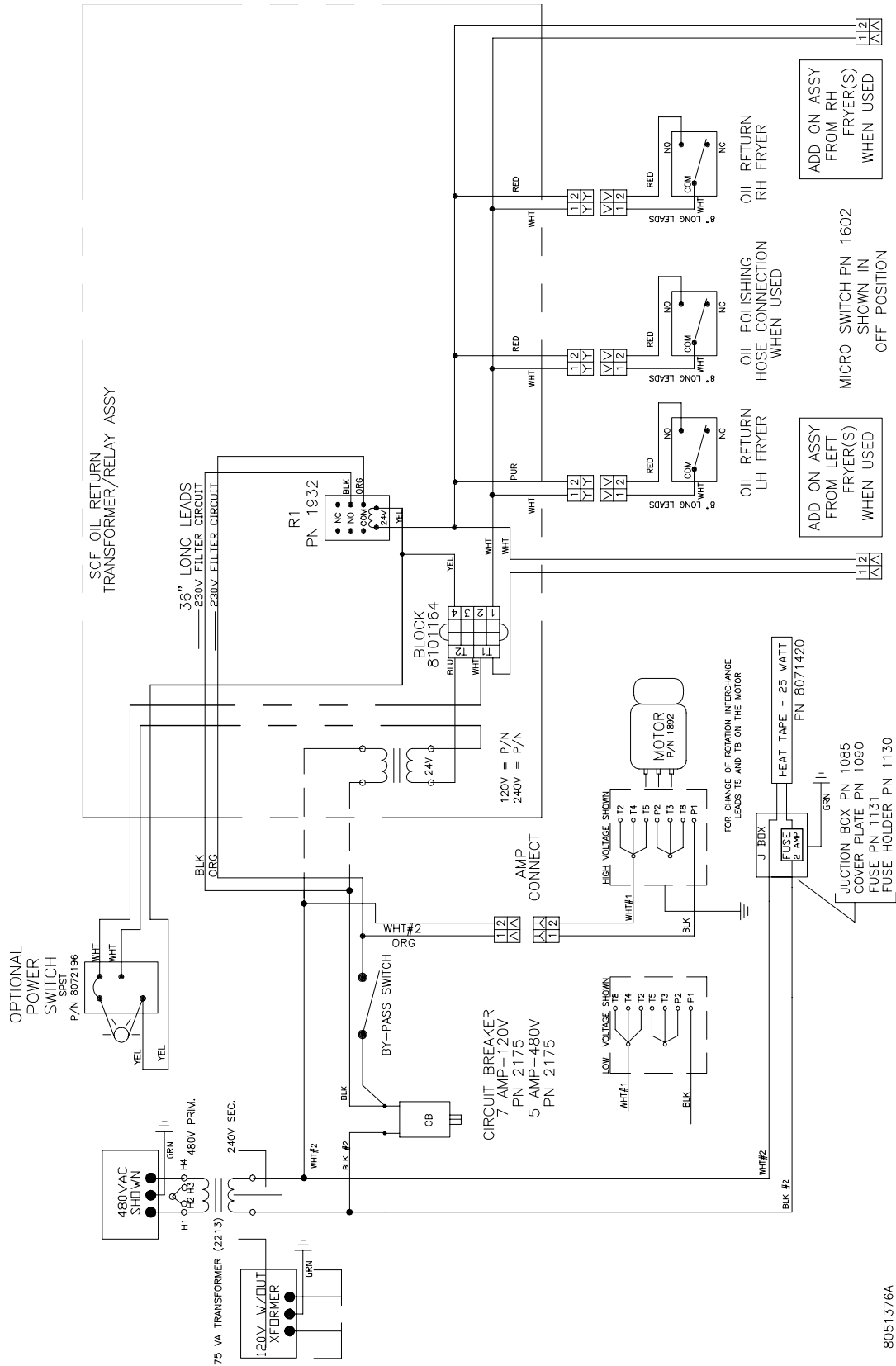
DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

Single Decathlon with SUFF Filtration and Basket Lifts (PBI)



DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

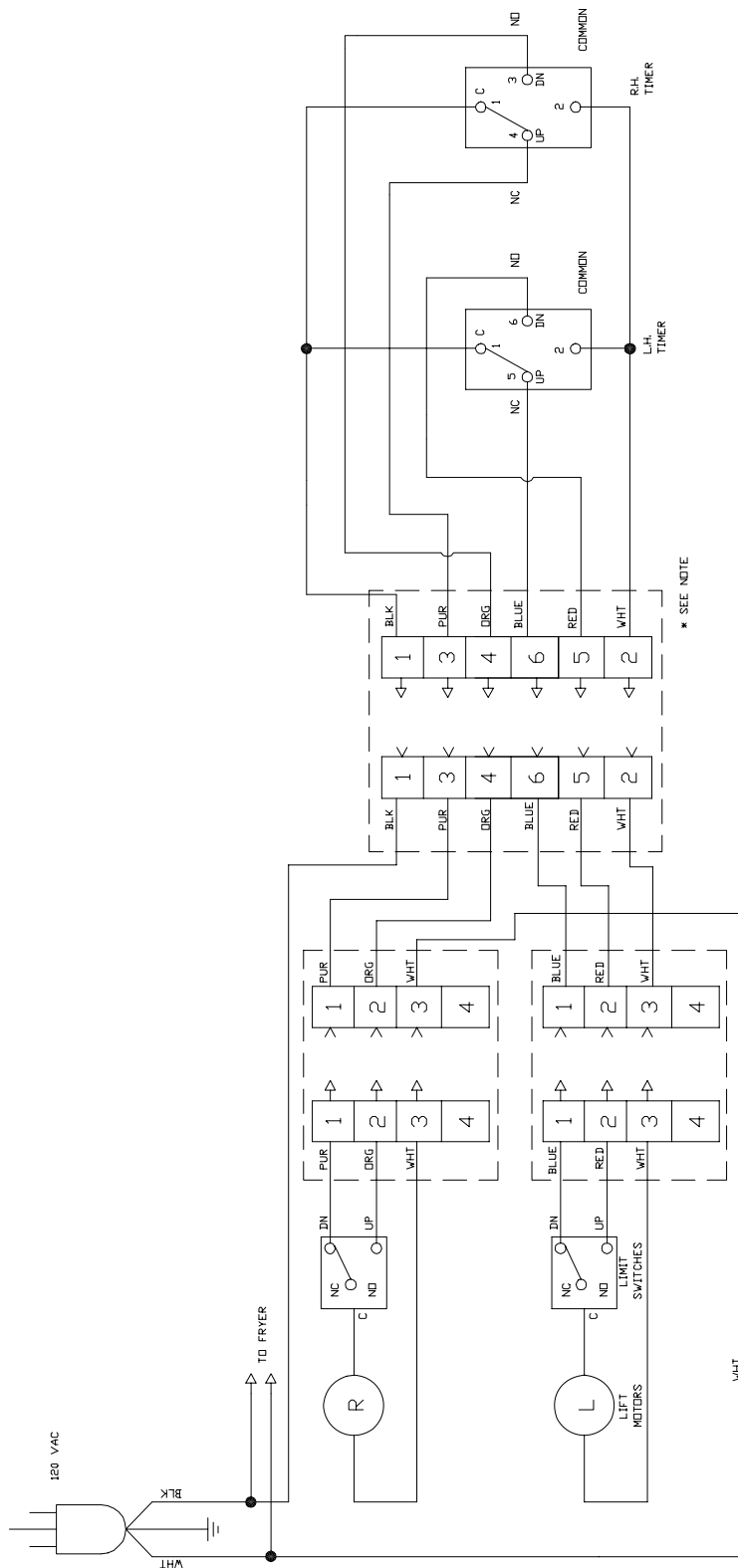
Oil Return, Left-hand, Normally Open Float Switch



8051376A

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

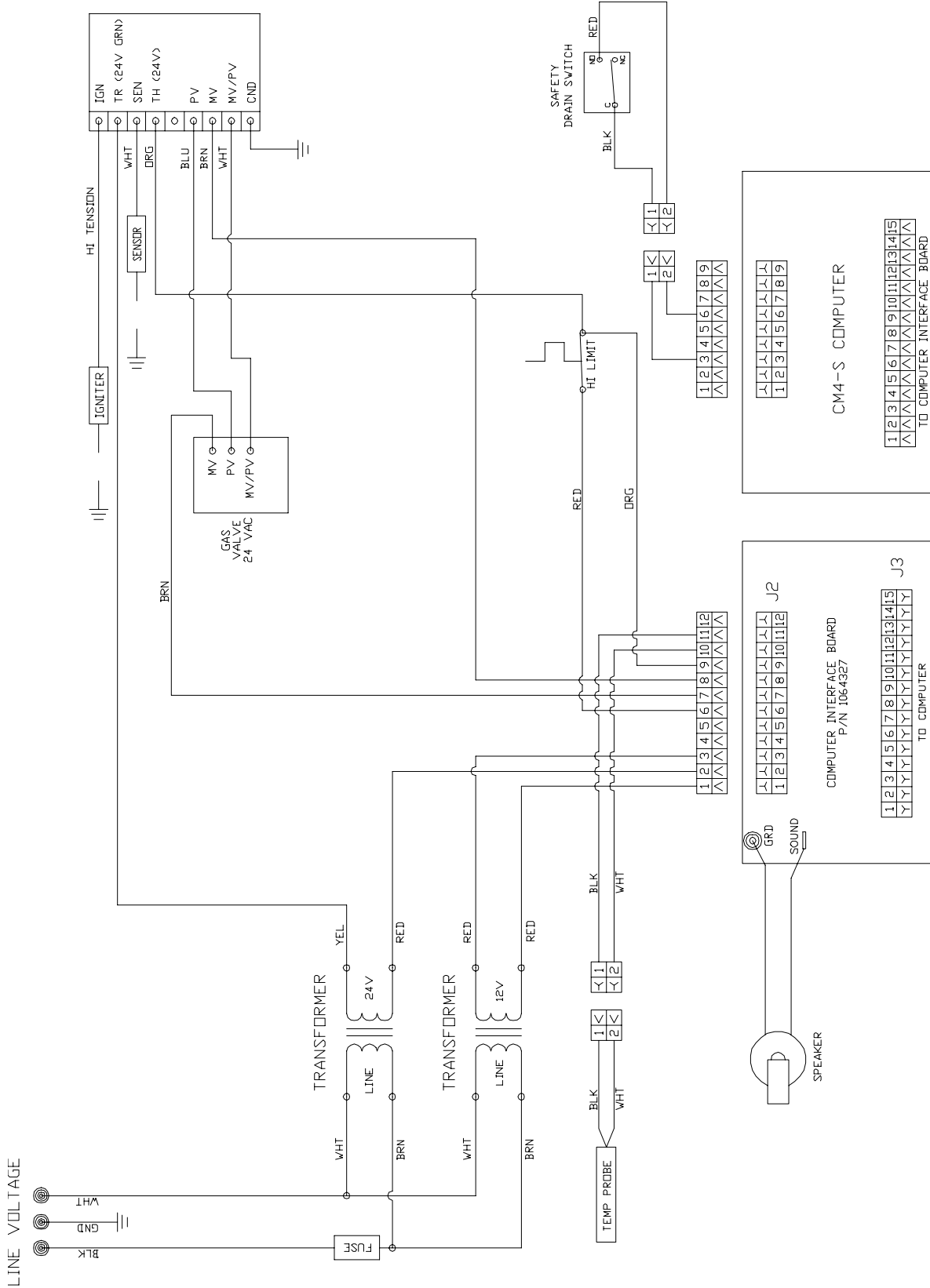
Basket Lift, with Timer



805-1411

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

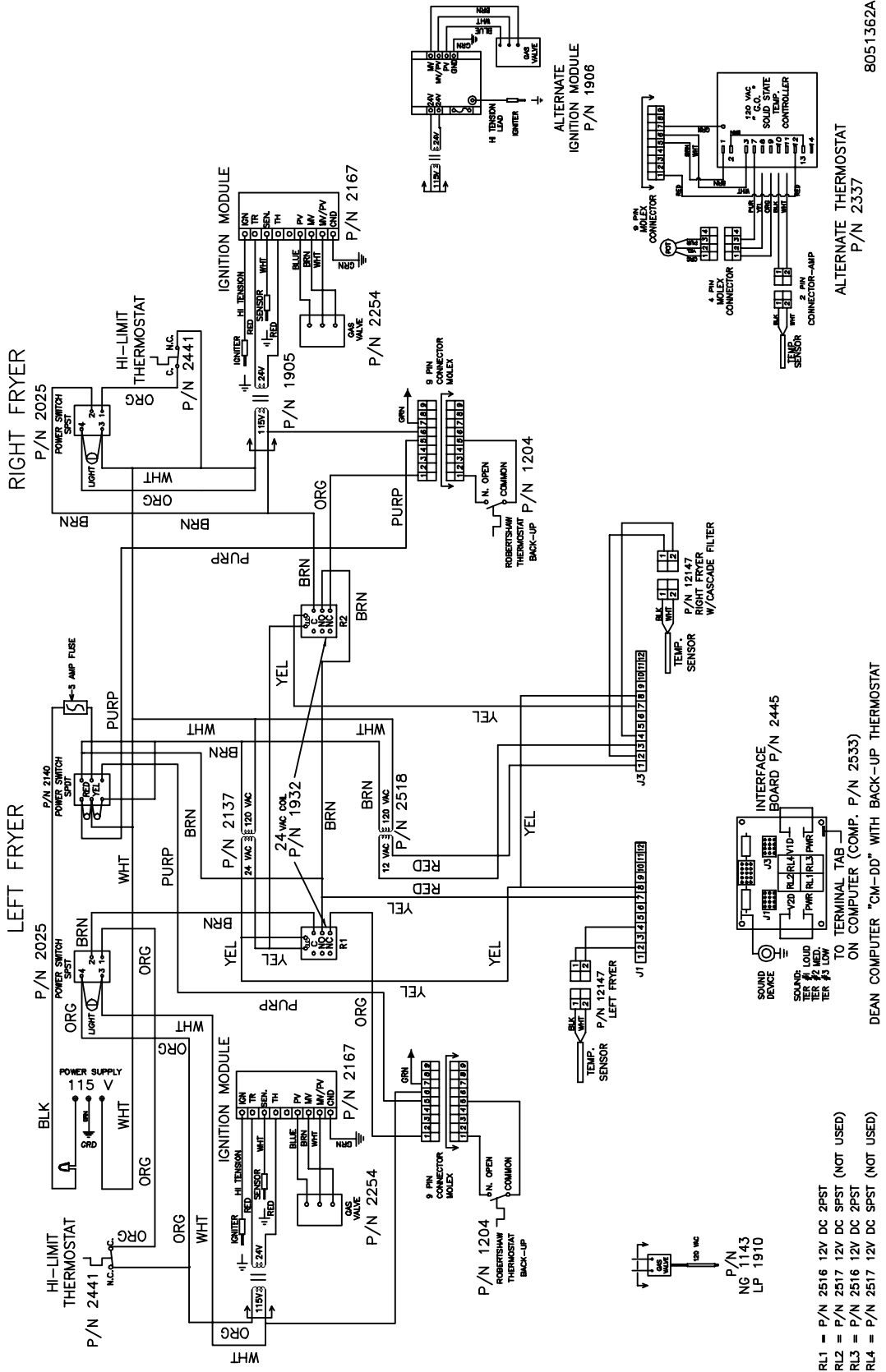
CM4-S with Constant Pilot



8051566A

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

Chili's Wiring Diagram



8051362A

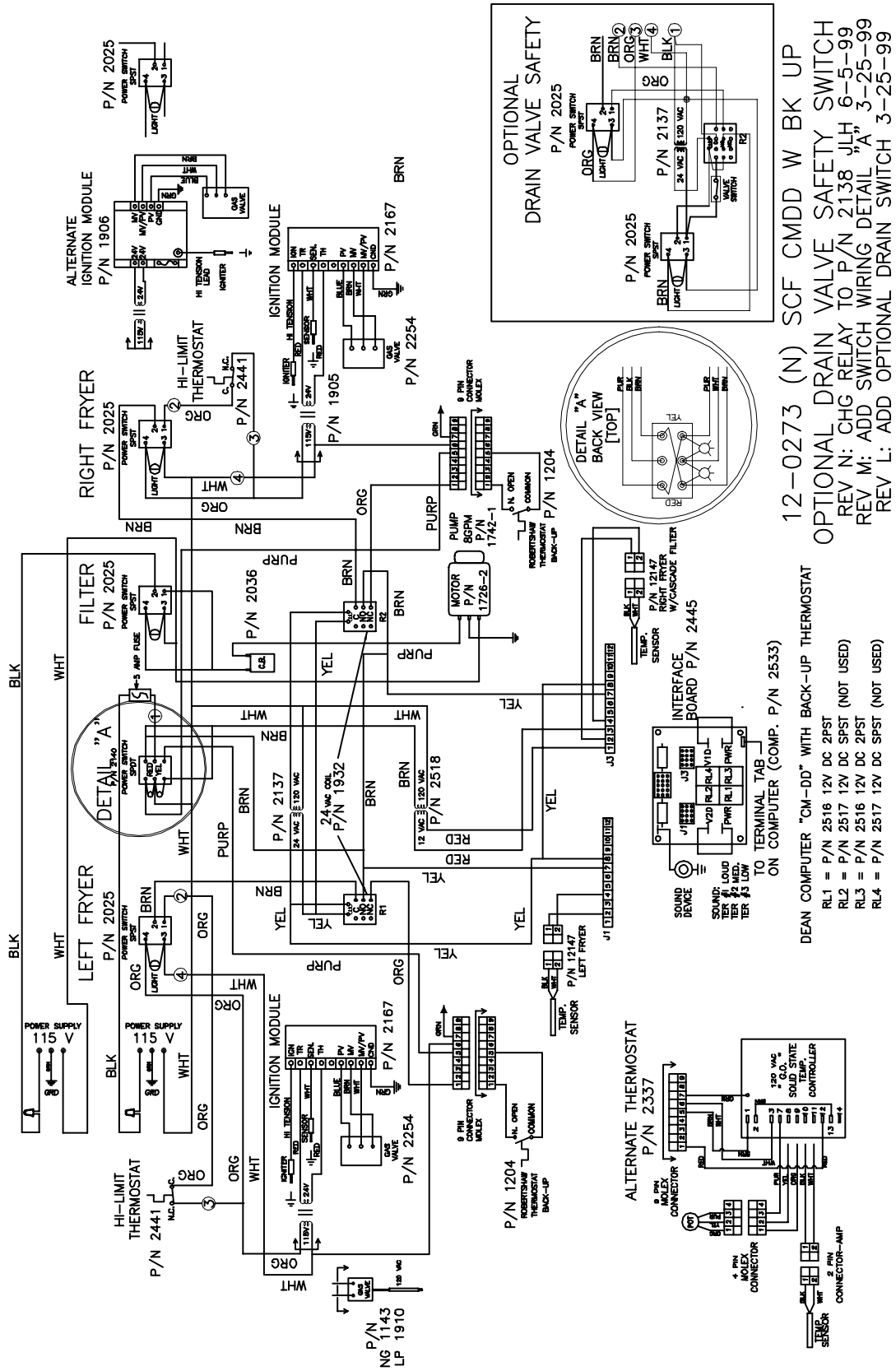
DEAN COMPUTER "CM-DD" WITH BACK-UP THERMOSTAT

P/N
NG 1143
LP 1910

RL1 = P/N 2516 12V DC SPST
RL2 = P/N 2517 12V DC SPST (NOT USED)
RL3 = P/N 2516 12V DC SPST
RL4 = P/N 2517 12V DC SPST (NOT USED)

DECATHLON SERIES GAS FRYERS CHAPTER 1: SERVICE PROCEDURES

Chili's Wiring with SCF Filtration



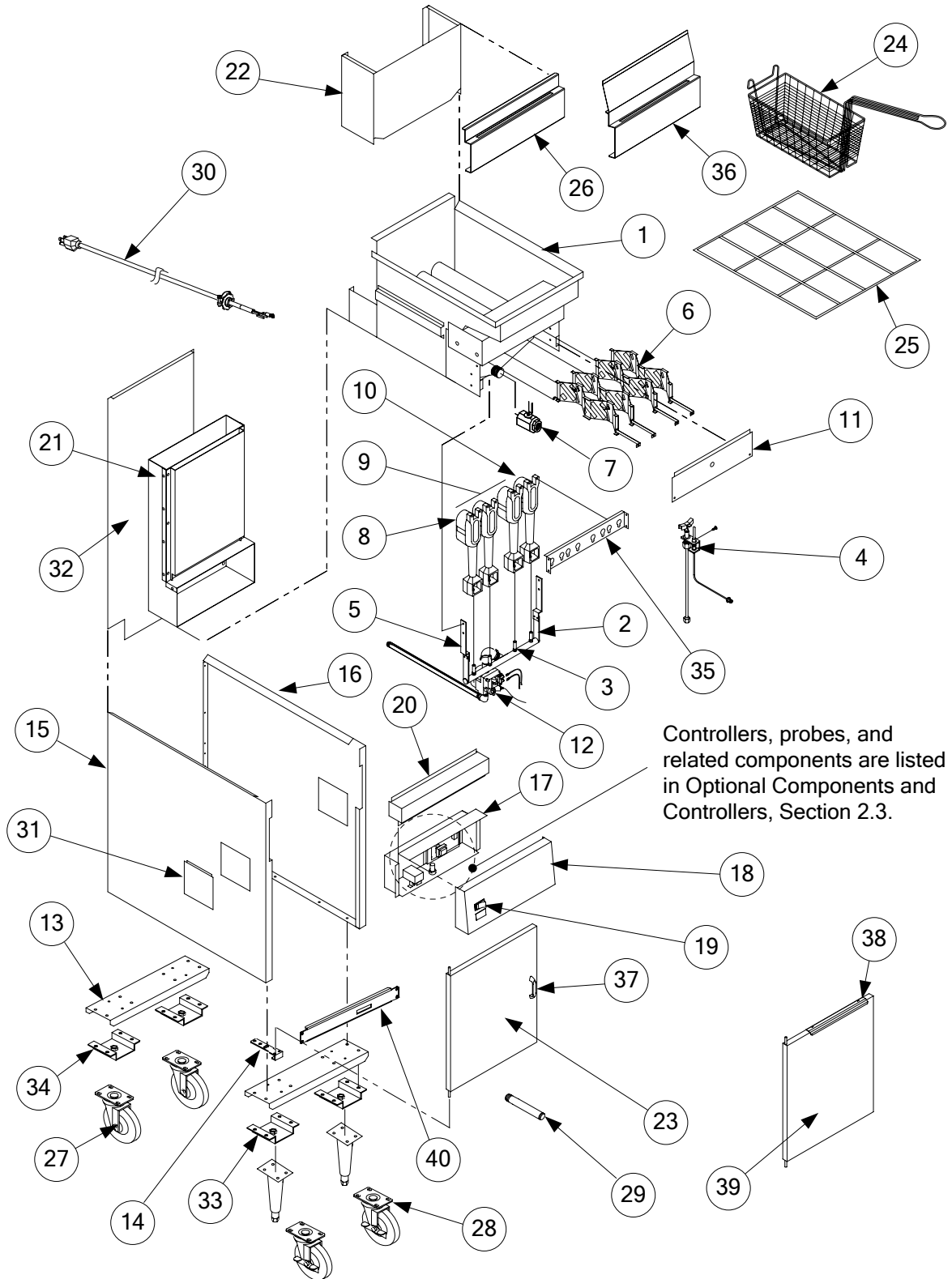
12-0273 (N) SCF CMDD W BK UP
 OPTIONAL DRAIN VALVE SAFETY SWITCH
 REV N: CHG RELAY TO P/N 2138 J1H 6-5-99
 REV M: ADD SWITCH WIRING DETAIL "A" 3-25-99
 REV L: ADD OPTIONAL DRAIN SWITCH 3-25-99

DEAN COMPUTER "CM-DD" WITH BACK-UP THERMOSTAT
 RL1 = P/N 2516 12V DC 2PST
 RL2 = P/N 2517 12V DC SPST (NOT USED)
 RL3 = P/N 2516 12V DC 2PST
 RL4 = P/N 2517 12V DC SPST (NOT USED)

DECATHLON SERIES GAS FRYERS

CHAPTER 2: PARTS LIST

2.1 Decathlon Primary Components



DECATHLON SERIES GAS FRYERS CHAPTER 2: PARTS LIST

Parts are labeled to indicate the appropriate fryer model ("D", "SCFD", "CFD", or "FPD65"). If a part is not labeled, it can be used on any of these models. Each section is labeled by size (e.g., D50) and parts are not interchangeable between different sized fryers.

Some SCFD fryers use Common Cabinet configurations and these parts are labeled "SCFD C/C;" otherwise, use "SCFD"-labeled parts when an "SCFD C/C" part is not indicated. To determine if the SCFD fryer utilizes Common Cabinet configuration, examine the door handles. A curved flat metal handle (Item 38, Section 2.1.2) indicates Common Cabinet configuration; a wireform handle (Item 37, Section 2.1.2) indicates a unit that does not have a Common Cabinet configuration. If you have any questions, call the Frymaster and Dean 24-Hour Service Hotline, 1-800-551-8633.

2.1.1 Decathlon D20 Primary Components

| ITEM | PART # | COMPONENT |
|------|-----------|--|
| 1 | 826-1875 | Frypot - S/S |
| 2 | 810-2167 | Manifold, Gas |
| 3 | 810-2050 | Orifice, Natural Gas #44, 2.18 mm |
| * | 810-2062 | Orifice, Natural Gas #38, 2.58 mm |
| * | 810-0710 | Orifice, LP Gas #54, 1.40 mm |
| * | 810-2060 | Orifice, G20/G25 Gas #42, 2.40 mm (CE only) |
| * | 810-2059 | Orifice, G31 Gas #53, 1.51 mm (CE only) |
| 4 | 810-2158 | Pilot Burner, Natural/G20/25 Gas |
| * | 810-2526 | Pilot Burner, LP/G31 Gas |
| * | 809-0766 | Nut, Keps 10-32 SS Hex |
| * | 809-0845 | Screw, 10-32 x $\frac{3}{8}$ " Hex Slotted Head |
| * | 810-0705 | Tube, Pilot Gas Supply |
| * | 810-0703 | Tube, $\frac{1}{4}$ " x 20" Pilot Gas Supply |
| 5 | 200-1615 | Manifold Support Bracket |
| 6 | 210-5216 | Diffuser Assembly |
| 7 | ▶▶▶ | See Drain Manifold Components, Section 2.5 |
| 8 | 810-2151 | Burner, Left Side |
| 9 | N/A | Burner, Center |
| 10 | 810-2150 | Burner, Right Side |
| 11 | 200-1331 | Heat Shield |
| 12 | 807-3552 | Gas Valve, Natural Gas Electronic Ignition, 24 VAC |
| * | 807-3628 | Gas Valve, LP Gas Electronic Ignition, 24 VAC |
| * | 810-2156 | Gas Valve, Natural Gas, 120 VAC |
| * | 810-2323 | Gas Valve, LP Gas, 120 VAC |
| * | 807-2091 | Gas Valve, G20/G25 Gas, 24 VAC (CE only) |
| * | 807-2127 | Gas Valve, G31 Gas, 24 VAC (CE only) |
| * | 807-3294 | Gas Valve, Natural Gas Constant Pilot, 24 VAC |
| * | 807-3295 | Gas Valve, LP Gas Constant Pilot, 24 VAC |
| * | 810-0691 | Vent Tube |
| 13 | 200-1148 | Channel, Front and Rear |
| 14 | 200-1675 | Bracket, Lower Hinge |
| 15 | 211-3261 | Side Panel, Left |
| * | 201-3268 | Panel, Inner Left (multi-battered units) |
| 16 | 212-3261 | Side Panel, Right |
| * | 202-3268 | Panel, Inner Right Side (multi-battered units) |
| 17 | 824-1025 | Wireway, Control Panel |
| 18 | 07-0132 | Control Panel, Blank |
| * | 07-0132-1 | Control Panel, One Hole |
| * | 07-0132-2 | Control Panel, Two Holes |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.1.1 Decathlon 20 Primary Components (cont.)

| ITEM | PART # | COMPONENT |
|------|------------|--|
| 19 | ▶▶▶ | See Optional Components, Section 2.3 |
| 20 | 824-1125 | Topcap (D50/D20) |
| * | 210-3323 | Topcap (D220) |
| 21 | 106-1583SP | Flue Assembly |
| * | 200-1342 | Shield, Flue Heat |
| * | 200-1344 | Front, Flue Box |
| * | 200-1351 | Rear, Flue Box |
| * | 200-3647 | Deflector, Flue |
| 22 | 823-3368 | Flue Cap |
| 23 | 106-2121SP | Door Assembly (D20) |
| * | 210-3266 | Panel, Door Outer |
| * | 200-3267 | Panel, Door Inner |
| * | 809-0918 | Screw, 10-24 x 1/2" Slotted Head (use with 810-2105) |
| * | 809-0191 | Washer, 1/4" Spring-lock (use with 810-2105) |
| * | 200-1301 | Pin, Door, 20 1/4" |
| * | 810-0066 | Magnetic Catch, Door |
| 24 | 823-0271 | Basket, Twin |
| 25 | 803-0327 | Grid, Frypot, Screen-type |
| 26 | 210-3368 | Hanger, Basket, D20 Single System |
| * | 210-3911 | Hanger, Basket, D250/20 System |
| 27 | 810-0356 | Caster, Plate-mount 5-inch without Brake |
| * | 810-2406 | Caster, Single Stud-mount 5-inch without Brake |
| 28 | 810-0357 | Caster, Plate-mount 5-inch with Brake |
| * | 810-2405 | Caster, Single Stud-mount 5-inch with Brake |
| * | 826-1389 | Screw, 1/4-20 x 3/4" Hex Head (for plate-mount casters, qty: 10) |
| 29 | 813-0669 | Drain Nipple, Extended 1" Drain |
| 30 | 106-0913SP | Cordset, 10' Power |
| 31 | 210-2804 | Cover, Outlet Duct |
| 32 | 200-3285 | Panel, Structural Back (D20, in multi-batteried systems) |
| * | 200-1674 | Panel, Structural Back (D220) |
| 33 | 810-2411 | Leg, Single Bolt Mount (black) |
| * | 806-3811 | Leg Package, 4-bolt Mount (4 per set) |
| * | 806-5043 | Leg, Single |
| 34 | 823-3636 | Leg Support Assembly |
| 35 | 823-3346 | Bracket, Burner Mounting |
| 36 | 823-3715 | Hanger, Basket D20 Single (Chili's units only) |
| 37 | 810-0180 | Handle, Door, Chrome |
| 38 | N/A | Handle, Door, Euro-look (SCFD C/C) |
| 39 | N/A | Door Assembly (SCFD C/C) |
| 40 | N/A | Brace, Front Horizontal, Single (SCFD C/C) |

* Not illustrated.

2.1.2 Decathlon D50 Primary Components

| ITEM | PART # | COMPONENT |
|------|----------|---|
| 1 | 826-1871 | Frypot - S/S (SCFD50, CFD50) |
| * | 826-1873 | Frypot - S/S (D50) |
| * | 826-1869 | Frypot - S/S, (DD50 Deep Depth, used in fryer batteries with D60) |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.1.2 Decathlon D50 Primary Components (cont.)

| ITEM | PART # | COMPONENT |
|------|----------|---|
| * | 826-2037 | Frypot, Cracker Barrel (1.5" Drain) |
| 2 | 810-2169 | Manifold, Gas (D50) |
| * | 810-2130 | Manifold, Gas (SCFD50) |
| 3 | 810-2048 | Orifice, Natural Gas #39 2.53 mm (non-CE D50GHP, SCFD50G) |
| * | 810-2062 | Orifice, Natural Gas #38, 2.58 mm |
| * | 810-2059 | Orifice, LP/G31 Gas #53, 1.51 mm (CE, D50; non-CE, D50G(DD)HP & SCFD50G) |
| 4 | 810-2032 | Pilot Burner, Natural/G20/25 Gas |
| * | 810-2155 | Pilot Burner, LP/G31 Gas |
| * | 106-1439 | Pilot Burner, Natural Gas, with Thermocouple |
| * | 106-0692 | Pilot Burner, Natural Gas, with Thermopile |
| * | 809-0766 | Nut, Keps 10-32 SS Hex |
| * | 809-0845 | Screw, 10-32 x $\frac{3}{8}$ " Hex Slotted Head |
| * | 810-0705 | Tube, $\frac{1}{4}$ " x 20" Pilot Gas Supply (one-piece gasline) |
| * | 810-0703 | Tube, $\frac{1}{4}$ " x 17 $\frac{1}{2}$ " Pilot Gas Supply (one-piece gasline) |
| 5 | 200-1314 | Bracket, Manifold Support |
| * | 200-1615 | Bracket, Manifold Support (right or left) |
| 6 | 210-5175 | Diffuser Assembly |
| 7 | ▶▶▶ | See Drain Manifold Components, Section 2.5 |
| 8 | 810-2151 | Burner, Left Side |
| 9 | 810-2149 | Burner, Center |
| 10 | 810-2150 | Burner, Right Side |
| 11 | 200-1330 | Heat Shield |
| * | 200-1363 | Lower Heat Shield |
| 12 | 807-3552 | Gas Valve, Natural Gas Electronic Ignition, 24 VAC |
| * | 807-3628 | Gas Valve, LP Gas Electronic Ignition, 24 VAC |
| * | 810-2156 | Gas Valve, Natural Gas, 120 VAC |
| * | 810-2323 | Gas Valve, LP Gas, 120 VAC |
| * | 807-3294 | Gas Valve, Natural Gas, Constant Pilot, 24 VAC |
| * | 807-3295 | Gas Valve, LP Gas, Constant Pilot, 24 VAC |
| * | 807-2091 | Gas Valve, G20/G25 Gas, 24 VAC (CE only) |
| * | 807-2127 | Gas Valve, G31 Gas, 24 VAC (CE only) |
| * | 810-0691 | Vent Tube |
| 13 | 200-1148 | Channel, Front and Rear |
| * | 220-0890 | Channel, Front (SCFD350 C/C) |
| * | 220-1433 | Channel, Front (SCFD350 C/C with matching cabinet) |
| * | 220-1335 | Channel, Rear (SCFD250 C/C) |
| * | 220-1372 | Channel, Rear (SCFD350 C/C) |
| * | 220-1432 | Channel, Rear (SCFD350 C/C with matching cabinet) |
| * | 200-2783 | Channel, Base (SCFD50) |
| * | 824-1800 | Channel, Base (SCFD C/C) |
| * | 106-5901 | Base, Cabinet (SCFD250 C/C) |
| * | 106-5904 | Base, Cabinet (SCFD350 C/C) |
| * | 106-6329 | Base, Cabinet (SCFD350 C/C with matching cabinet) |
| 14 | 200-1675 | Lower Hinge Bracket (previous production D50) |
| * | 823-5346 | Hinge, Lower Left (current production D50, SCFD50) |
| * | 823-5347 | Hinge, Lower Right (current production D50, SCFD50) |
| * | 823-4894 | Hinge, Lower Left (current production SCFD50 C/C) |
| * | 823-4895 | Hinge, Lower Right (current production SCFD50 C/C) |
| * | 823-5136 | Hinge, Upper Left (current production SCFD50 C/C) |
| * | 823-5137 | Hinge, Upper Right (current production SCFD50 C/C) |
| * | 823-5348 | Hinge, Upper Left (current production D50, SCFD50, SCFD250P C/C) |
| * | 823-5349 | Hinge, Upper Right (current production D50, SCFD50, SCFD250P C/C) |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.1.2 Decathlon D50 Primary Components (cont.)

| ITEM | PART # | COMPONENT |
|------|------------|---|
| 15 | 211-2787 | Side Panel, Left Side (SCFD50) |
| * | 231-2060 | Side Panel, Left Side (SCFD50 C/C) |
| 16 | 212-2787SP | Side Panel, Right Side (SCFD50) |
| * | 232-2060 | Side Panel, Right Side (SCFD50 C/C) |
| 17 | 824-0961 | Wireway, Control Panel |
| 18 | 210-3716 | Control Panel, Blank |
| * | 210-2908 | Control Panel, One Hole |
| * | 210-2051 | Control Panel, Two Holes |
| * | 210-3747 | Control Panel, Three Holes |
| * | 210-3715 | Control Panel, Three Holes (basket lift option) |
| 19 | ▶▶▶ | See Optional Components, Section 2.3 |
| 20 | 824-1103 | Top Cap, Single System (D50, CFD50) |
| * | 824-0982 | Top Cap, Double System (D50, SCFD50) |
| | 106-5955 | Top Cap, Double System (SCFD250 C/C) |
| * | 824-0983 | Top Cap, Triple System (D50, SCFD50) |
| * | 106-5955 | Top Cap, Triple System (SCFD350 C/C) |
| * | 106-3333 | Top Cap, Triple System (SCFD350 C/C with extra matching cabinet) |
| * | 824-0984 | Top Cap, Quad System (D50, SCFD50) |
| * | 824-1125 | Top Cap (D50/D20) |
| 21 | 106-1742SP | Flue Box Assembly |
| * | 823-3634 | Flue Cap Assembly (2-battery) |
| * | 200-2872 | Shield, Flue Heat |
| * | 200-1343 | Front, Flue Box |
| * | 200-1350 | Rear, Flue Box |
| * | 200-3651 | Deflector, Flue |
| 22 | 823-3521 | Flue Cap, D50/CFD & 15MC (Single) |
| 23 | 106-1754SP | Door Assembly (D50) |
| * | 210-2869 | Panel, Outer Door |
| * | 200-1379 | Panel, Inner Door |
| * | 106-4727 | Door Assembly, Left (SCFD50) |
| * | 106-4728 | Door Assembly, Right (SCFD50) |
| * | 210-8946 | Panel, Outer Door |
| * | 201-8945 | Panel, Inner Door, Left |
| * | 202-8945 | Panel, Inner Door, Right |
| * | 809-0918 | Screw, 10-24 x 1/2" Slotted Head (use with 810-2105) |
| * | 809-0191 | Washer, 1/4" Spring-lock (use with 810-2105) |
| * | 200-1301 | Pin, Door, Long (D50) |
| * | 210-9889 | Pin, Door (SCFD50) |
| * | 810-0066 | Magnetic Catch, Door (D50) |
| * | 810-1105 | Magnetic Catch, Door (SCFD50) |
| 24 | 803-0271 | Basket, Twin |
| * | 803-0099 | Basket, Full |
| 25 | 803-0277 | Grid Assembly, Fine Mesh |
| 26 | 210-1595 | Hanger, Basket, Single System, (attaches to flue) |
| * | 210-3131 | Hanger, Basket, Double System (attaches to flue) |
| 27 | 810-0356 | Caster, Plate-mount, 5-inch without Brake |
| * | 810-2281 | Caster, Plate-mount, 5-inch with Brake ("Tile Safe" Cracker Barrel) |
| * | 810-2406 | Caster, Single Stud-mount, 5-inch without Brake |
| 28 | 810-0357 | Caster, Plate-mount, 5-inch with Brake |
| * | 810-2280 | Caster, Adj. Swivel, 3-inch with Brake ("Tile Safe" Cracker Barrel) |
| * | 810-2405 | Caster, Single Stud-mount, 5-inch with Brake |
| * | 826-1389 | Screw, 1/4-20 x 3/4" Hex Head (for plate-mount casters, qty: 10) |
| 29 | 812-1226SP | Drain Nipple, Extended 1 1/4" Drain |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.1.2 Decathlon D50 Primary Components (cont.)

| ITEM | PART # | COMPONENT |
|------|------------|--|
| * | 812-1717 | Drain Nipple, Extended 1½" Drain |
| 30 | 106-0913SP | Cordset, 10' Power |
| 31 | 210-2804 | Cover, Outlet Duct |
| 32 | 200-1674 | Back Panel, Lower (D50/CFD50) |
| 33 | 810-2411 | Leg, Single Bolt Mount (black) |
| * | 806-3811 | Leg Package, 4 Bolt Mount (4 per set) |
| 34 | 823-3248 | Leg Support Assembly |
| 35 | 200-1329 | Burner Mounting Bracket |
| 36 | 823-4075 | Hanger, Basket, Single with 6" Splash Guard |
| * | 823-3710 | Hanger, Basket, Double System (UFF) With 6" Splash Guard |
| 37 | 810-0180 | Handle, Chrome, Door (D50, SCFD50) |
| 38 | 810-2077 | Handle, Euro-lock, Door (SCFD C/C) |
| 39 | 106-7542 | Door Assembly (SCFD C/C) |
| * | 230-2256 | Panel, Door |
| * | 220-2259 | Panel, Door Liner |
| 40 | 220-0891 | Brace, Front Horizontal, Single (SCFD C/C) |
| * | 220-0882 | Brace, Front Horizontal, Double (SCFD C/C) |

* Not illustrated.

2.1.3 Decathlon D60 Primary Components

| ITEM | PART # | COMPONENT |
|------|----------|---|
| 1 | 826-2229 | Frypot - S/S, ½" Drain (D60, CFD60, SCFD60) |
| * | 826-1802 | Frypot - S/S, 1¼" Drain <u>Non-Filtration</u> |
| * | 826-1826 | Frypot - S/S, Cascade Filter |
| * | 812-1666 | Coupling, Thermostat Entry |
| * | 813-0036 | Collar, Thermostat |
| * | 210-1650 | Deflector, Oil Return |
| * | 812-1501 | Nipple, 1½" NPT x 1 NPT |
| 2 | 810-2072 | Gas Manifold (weld assembly) |
| 3 | 810-2048 | Orifice, Natural Gas #39 2.53 mm (non-CE) |
| * | 810-2059 | Orifice, LP Gas #53 1.51 mm (CE and non-CE) |
| * | 810-2060 | Orifice, Nat. Gas/G20/G25 (CE only) |
| 4 | 810-2032 | Pilot Burner, Natural/G20/25 Gas (primary and trailing, 120V) |
| * | 810-2155 | Pilot Burner, LP/G31 Gas (primary and trailing) |
| * | 812-1674 | Pilot Burner, Mod. Natural Gas (electronic ignition) |
| * | 809-0766 | Nut, Keps 10-32 SS Hex (primary and trailing) |
| * | 809-0845 | Screw, 10-32 x ¾" Hex Slotted Head (primary and trailing) |
| * | 810-0705 | Tube, Pilot Gas Supply, ¼" x 23" (one-piece gasline) |
| * | 810-0703 | Tube, Pilot Gas Supply, ¼" x 17½" (one-piece gasline) |
| * | 810-2138 | Valve, Trailing Pilot, Adjustable (trailing pilot only) |
| 5 | 200-1314 | Bracket, Manifold Support |
| * | 200-1615 | Bracket, Manifold Support (right or left) |
| 6 | 210-8387 | Diffuser Assembly |
| 7 | ▶▶▶ | See Drain Manifold Components, Section 2.5 |
| 8 | 810-2151 | Burner, Left Side |
| 9 | 810-2149 | Burner, Center |
| 10 | 810-2150 | Burner, Right Side |
| 11 | 200-1324 | Heat Shield, Lower (D60) |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.1.3 Decathlon D60 Primary Components (cont.)

| ITEM | PART # | COMPONENT |
|------|----------|---|
| * | 200-1363 | Heat Shield, Lower (SCFD60) |
| * | 824-0970 | Heat Shield, Vessel (SCFD60) |
| * | 812-0211 | Insulation, Kaowool Blanket, .5" x 7.5" x 17.5" |
| * | 824-0969 | Support, Burner |
| 12 | 807-3552 | Gas Valve, Natural Gas, Electronic Ignition, 24 VAC (¾" in, ½" out) |
| * | 807-3628 | Gas Valve, LP Gas, Electronic Ignition, 24 VAC |
| * | 807-3294 | Gas Valve, Natural Gas, Constant Pilot, 24 VAC |
| * | 807-3295 | Gas Valve, LP Gas, Constant Pilot, 24 VAC |
| * | 810-2156 | Gas Valve, Natural Gas, 120 VAC |
| * | 810-2323 | Gas Valve, LP Gas, 120 VAC |
| * | 807-2091 | Gas Valve, G20/G25 Gas, 24 VAC (CE only) |
| * | 807-2127 | Gas Valve, G31 Gas, 24 VAC (CE only) |
| * | 810-0691 | Vent Tube |
| * | 823-3347 | Frame, Slide Base (SCFD60) |
| 13 | 200-2493 | Channel, Rear and Front (D60) |
| * | 200-3219 | Channel, Rear and Front (SCFD60) |
| * | 200-1198 | Channel, Base (Single) |
| * | 200-1463 | Channel, Base (Double) |
| * | 200-1393 | Channel, Lower Joiner (SCFD60) |
| 14 | 200-1675 | Lower Hinge Bracket (previous production D60) |
| * | 823-5346 | Hinge, Lower Left (current production D60, SCFD60) |
| * | 823-5347 | Hinge, Lower Right (current production D60, SCFD60) |
| * | 823-5348 | Hinge, Upper Left (current production D60, SCFD60) |
| * | 823-5349 | Hinge, Upper Right (current production D60, SCFD60) |
| 15 | 211-2532 | Side Panel, Left Side (unit exterior; D60) |
| 16 | 212-2532 | Side Panel, Right Side (unit exterior; D60) |
| * | 211-4570 | Side Panel, Left Side (unit exterior; SCFD60) |
| * | 212-4570 | Side Panel, Right Side (unit exterior; SCFD60) |
| * | 201-4775 | Side Panel, Left Side with Hole (unit interior) |
| * | 202-4775 | Side Panel, Right Side with Hole (unit interior) |
| * | 201-1245 | Panel, Inner Left (divider located over filter unit) |
| * | 202-1245 | Panel, Inner Right (divider located over filter unit) |
| 17 | 824-0951 | Wireway, Control Panel (D60) |
| * | 824-1195 | Wireway, Control Panel (SCFD60) |
| 18 | ▶▶▶ | See Control Panel Options, Joiner Strips, and Accessories, Section 2.2 |
| 19 | ▶▶▶ | See Optional Components, Section 2.3 |
| 20 | 824-0987 | Top Cap (Single) |
| * | 824-0937 | Top Cap (2-battery) |
| * | 106-1258 | Flue Assembly |
| * | 809-0997 | Washer, ½ SAE "N" S/S |
| * | 809-0169 | Screw, #12 x ¾" Hex Washer Slotted Head |
| * | 809-0428 | Screw, ¼-20 x ½" Hex Head |
| * | 809-0417 | Nut, Flange ¼-20 Serrated |
| 21 | 106-0997 | Flue Box Assembly |
| * | 200-1339 | Front, Flue Box |
| * | 200-1773 | Back, Flue Box |
| * | 200-1325 | Shield, Flue Box |
| * | 809-0167 | Screw, Sheet Metal 10 A x ⅝ B |
| * | 200-3649 | Deflector, Flue |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.1.3 Decathlon D60 Primary Components (cont.)

| ITEM | PART # | COMPONENT |
|------|------------|--|
| 22 | 106-1703SP | Flue Cap (Single) |
| * | 823-3516 | Flue Cap (2-battery) |
| 23 | 106-2898SP | Door Assembly, with Liner (D60) |
| * | 200-1185 | Panel, Door, Inner |
| * | 210-1424 | Panel, Door, Outer |
| * | 106-4721 | Door Assembly, Left (SCFD60) |
| * | 200-4794 | Panel, Door, Inner |
| * | 211-8935 | Panel, Door, Outer |
| * | 106-4722 | Door Assembly, Right (SCFD60) |
| * | 200-4794 | Panel, Door, Inner |
| * | 212-8935 | Panel, Door, Outer |
| * | 809-0918 | Screw, 10-24 x 1/2" Slotted Head (use with 810-2105) |
| * | 809-0191 | Washer, 1/4" Spring-lock (use with 810-2105) |
| * | 200-1301 | Pin, Door (D60) |
| * | 210-9889 | Pin, Door (SCFD60) |
| * | 810-0066 | Magnetic Catch/Plate, Door (D60) |
| * | 810-1105 | Magnetic Catch/Plate, Door (SCFD60) |
| 24 | 803-0304 | Fry Basket, 6 x 8 3/4" x 16 3/4" |
| 25 | 803-0149 | Grid Assembly, Mesh |
| * | 810-2235 | Grid Assembly, Rack |
| 26 | 210-2737SP | Basket Hanger, Single, no Splash Guard |
| * | 823-3349 | Basket Hanger, Double, Tall |
| * | 823-4780 | Basket Hanger, Chili's Single System, 6" Splash Guard |
| * | 823-4999 | Basket Hanger, Chili's Double System, 6" Splash Guard |
| 27 | 810-0356 | Caster, Plate-mount 5" without Brake |
| * | 810-2406 | Caster, Single Stud-mount 5" without Brake |
| 28 | 810-0357 | Caster, Plate-mount 5" with Brake |
| * | 810-2405 | Caster, Single Stud Mount 5" with Brake |
| * | 826-1389 | Screw, 1/4-20 x 3/4" Hex Head (for plate-mount casters, qty: 10) |
| 29 | 812-1226SP | Drain Nipple, Extended, 1 1/4" |
| * | 812-1717SP | Drain Nipple, Extended, 1 1/2" |
| 30 | 106-0913SP | Cordset, 10' Power |
| 31 | 210-2804 | Cover, Outlet Duct |
| 32 | 200-1327 | Back Panel, Lower |
| * | 200-1213 | Back Panel, Upper |
| 33 | 810-2411 | Leg, Single Bolt Mount (black) |
| * | 806-3811 | Leg Package, 4 Bolt Mount (4 per set) |
| 34 | 823-3248 | Leg Support Assembly |
| 35 | 200-2065 | Bracket, Burner Mounting |
| 36 | 823-4999 | Hanger, Basket, Double |
| * | 810-2793 | Hanger, Basket, Single, Wire |
| * | 823-4780 | Hanger, Basket, Chili's |
| 37 | 810-0180 | Handle, Door, Chrome |
| 38 | N/A | Handle, Door, Euro-look (SCFD C/C) |
| 39 | N/A | Door Assembly (SCFD C/C) |
| 40 | N/A | Brace, Front Horizontal, Single (SCFD C/C) |
| * | 200-2308 | Post, Door (SCFD60) |
| * | 201-1182 | Gusset, Side Panel Left (SCFD60) |
| * | 202-1182 | Gusset, Side Panel Right (SCFD60) |
| * | 200-1611 | Base (SCFD60) |
| * | 210-2804 | Duct, Door Access (SCFD60) |
| * | 200-2713 | Plate, Suction Manifold (SCFD60) |
| * | 210-1180 | Insert, Suction Manifold (SCFD60) |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.1.4 Decathlon FPD65 Primary Components

| ITEM | PART # | COMPONENT |
|------|------------|---|
| 1 | 823-3948SP | Frypot - S/S |
| * | 812-1666 | Coupling, Thermostat Entry |
| * | 813-0036 | Collar, Thermostat |
| * | 210-1650 | Deflector, Oil Return |
| * | 812-1501 | Nipple, 1½" NPT x 1 NPT |
| 2 | 810-2072 | Gas Manifold (weld assembly) |
| 3 | 810-2048 | Orifice, Natural Gas #39 2.53 mm (non-CE) |
| * | 810-2059 | Orifice, LP Gas #53 1.51 mm (CE and non-CE) |
| * | 810-2497 | Orifice, Butane Gas #55 1.32mm |
| * | 810-0710 | Orifice, LP Gas #54 1.4mm |
| * | 810-2050 | Orifice, Natural Gas #44 2.18mm |
| * | 810-2060 | Orifice, Natural/G20/G25 Gas #42 (CE only) |
| 4 | 810-2032 | Pilot Burner, Natural/G20/25 Gas (primary and trailing, 120V) |
| * | 810-2155 | Pilot Burner, LP/G31 Gas (primary and trailing) |
| * | 812-1674 | Pilot Burner, Mod. Natural Gas (electronic ignition) |
| * | 809-0766 | Nut, Keps 10-32 SS Hex (primary and trailing) |
| * | 809-0845 | Screw, 10-32 x ¾" Hex Slotted Head (primary and trailing) |
| * | 810-0705 | Tube, Pilot Gas Supply, ¼" x 23" (one-piece gasline) |
| * | 810-0703 | Tube, Pilot Gas Supply, ¼" x 17½" (one-piece gasline) |
| * | 810-2138 | Valve, Trailing Pilot, Adjustable (trailing pilot only) |
| 5 | 200-1314 | Bracket, Manifold Support |
| * | 200-1615 | Bracket, Manifold Support (right or left) |
| 6 | 210-5177 | Diffuser Assembly |
| 7 | ▶▶▶ | See Drain Manifold Components, Section 2.5 |
| 8 | 810-2151 | Burner, Left Side |
| 9 | 810-2149 | Burner, Center |
| 10 | 810-2150 | Burner, Right Side |
| 11 | 200-1363 | Heat Shield, Lower |
| * | 824-0970 | Heat Shield, Vessel |
| * | 824-0969 | Support, Burner |
| 12 | 807-3552 | Gas Valve, Natural Gas, Electronic Ignition, 24 VAC |
| * | 807-3628 | Gas Valve, LP Gas, Electronic Ignition, 24 VAC |
| * | 807-3294 | Gas Valve, Natural Gas, Constant Pilot, 24 VAC |
| * | 807-3295 | Gas Valve, LP Gas, Constant Pilot, 24 VAC |
| * | 810-2156 | Gas Valve, Natural Gas, 120 VAC |
| * | 810-2323 | Gas Valve, LP Gas, 120 VAC |
| * | 807-2091 | Gas Valve, G20/G25 Gas, 24 VAC (CE only) |
| * | 807-2127 | Gas Valve, G31 Gas, 24 VAC (CE only) |
| * | 810-0691 | Vent Tube |
| * | 823-3347 | Frame, Slide Base |
| 13 | 200-3219 | Channel, Rear and Front |
| * | 200-1198 | Channel, Base |
| * | 200-1393 | Channel, Lower Joiner |
| 14 | 200-9886 | Lower Hinge Bracket |
| * | 823-5346 | Hinge, Lower Left |
| * | 823-5347 | Hinge, Lower Right |
| * | 823-5348 | Hinge, Upper Left |
| * | 823-5349 | Hinge, Upper Right |
| 15 | 211-4570 | Side Panel, Left Side (unit exterior) |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.1.4 Decathlon FPD65 Primary Components (cont.)

| ITEM | PART # | COMPONENT |
|------|------------|---|
| 16 | 212-4570 | Side Panel, Right Side (unit exterior) |
| * | 201-4775 | Side Panel, Left Side with Hole (unit interior) |
| * | 202-4775 | Side Panel, Right Side with Hole (unit interior) |
| * | 201-4237 | Panel, Inner Left (divider located over filter unit) |
| * | 202-4237 | Panel, Inner Right (divider located over filter unit) |
| 17 | 824-1195 | Wireway, Control Panel |
| 18 | ▶▶▶ | See Control Panel Options, Joiner Strips, and Accessories, Section 2.2 |
| 19 | ▶▶▶ | See Optional Components, Section 2.3 |
| 20 | 824-0987 | Top Cap |
| * | 824-0937 | Top Cap, Two-vat |
| * | 106-2634SP | Flue Assembly |
| * | 809-0997 | Washer, 1/2 SAE "N" S/S |
| * | 809-0169 | Screw, #12 x 3/4" Hex Washer Slotted Head |
| * | 809-0417 | Nut, Flange 1/4-20 Serrated |
| * | 809-0428 | Screw, 1/4-20 x 1/2" Hex Head |
| 21 | | Flue Box Assembly |
| * | 200-1339 | Front, Flue Box |
| * | 200-1773 | Back, Flue Box |
| * | 200-1325 | Shield, Flue Box |
| * | 809-0167 | Screw, Sheet Metal 10 A x 5/8 B |
| * | 200-3649 | Deflector, Flue (use screws 809-0437) |
| * | 210-6525 | Deflector, Flue, Chili's (use screws 809-0437) |
| 22 | 106-1703SP | Flue Cap, Single System |
| * | 823-3516 | Flue Cap, Double System |
| 23 | 106-2898SP | Door Assembly, with Liner |
| * | 200-4794 | Panel, Door, Inner |
| * | 210-4792 | Panel, Door, Outer |
| * | 106-4721 | Door Assembly, Left |
| * | 200-4794 | Panel, Door, Inner |
| * | 211-8935 | Panel, Door, Outer |
| * | 106-4722 | Door Assembly, Right |
| * | 200-4794 | Panel, Door, Inner |
| * | 212-8935 | Panel, Door, Outer |
| * | 809-0918 | Screw, 10-24 x 1/2" Slotted Head (use with 810-2105) |
| * | 809-0191 | Washer, 1/4" Spring-lock (use with 810-2105) |
| * | 200-1301 | Pin, Door, 20" long |
| * | 810-1105 | Magnetic Catch/Plate, Door (offset) |
| 24 | 803-0304 | Fry Basket, 6 x 8 3/4" x 16 3/4" |
| 25 | 803-0149 | Grid Assembly, Mesh |
| * | 810-2235 | Grid Assembly, Rack |
| 26 | 210-2737SP | Basket Hanger, Single System, no Splash Guard |
| * | 823-4780 | Basket Hanger, Chili's Single System, 6" Splash Guard |
| * | 823-4999 | Basket Hanger, Chili's Double System, 6" Splash Guard |
| * | 823-4767 | Splash Guard |
| 27 | 810-0356 | Caster, Plate-mount 5" without Brake |
| * | 810-2406 | Caster, Single Stud-mount 5" without Brake |
| 28 | 810-0357 | Caster, Plate-mount 5" with Brake |
| * | 810-2405 | Caster, Single Stud Mount 5" with Brake |
| * | 826-1389 | Screw, 1/4-20 x 3/4" Hex Head (for plate-mount casters, qty: 10) |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.1.4 Decathlon FPD65 Primary Components (cont.)

| ITEM | PART # | COMPONENT |
|------|------------|--|
| 29 | 812-1226SP | Drain Nipple, Extended |
| 30 | 106-0913SP | Cordset, 10' Power |
| 31 | 210-2804 | Cover, Outlet Duct |
| 32 | 200-1213 | Upper Structural Back |
| * | 200-1327 | Lower Structural Back |
| 33 | 810-2411 | Leg, Single Bolt Mount (black) |
| * | 806-3811 | Leg Package, 4 Bolt Mount (4 per set) |
| 34 | 823-3248 | Leg Support Assembly |
| 35 | 200-2065 | Bracket, Burner Mounting |
| * | 200-2308 | Post, Door |
| * | 201-1182 | Gusset, Side Panel Left |
| * | 202-1182 | Gusset, Side Panel Right |
| * | 200-1611 | Base |
| * | 210-2804 | Duct, Door Access |
| * | 200-2713 | Plate, Suction Manifold |
| * | 210-1180 | Insert, Suction Manifold |
| 36 | 210-6763 | Hanger, Basket, Single |
| 37 | 810-0180 | Handle, Door, Chrome |
| 38 | N/A | Handle, Door, Euro-look (SCFD C/C) |
| 39 | N/A | Door Assembly (SCFD C/C) |
| 40 | N/A | Brace, Front Horizontal, Single (SCFD C/C) |

* Not illustrated.

2.1.5 Decathlon D80 Primary Components

| ITEM | PART # | COMPONENT |
|------|------------|--|
| 1 | 823-3494SP | Frypot - S/S 1 $\frac{1}{4}$ " Drain (D80, after 10/99) |
| * | 826-1891 | Frypot - S/S 1 $\frac{1}{4}$ " Drain (D80, before 10/99) |
| * | 823-3396SP | Frypot - S/S 1 $\frac{1}{2}$ " Drain (D80, SCFD80) |
| 2 | 810-2072 | Gas Manifold (welded assembly) |
| 3 | 810-2049 | Orifice, Natural Gas #43 2.26 mm (non-CE D80G) |
| * | 810-0710 | Orifice, LP Gas #54 1.40 mm (non-CE D80G) |
| * | 810-2161 | Orifice, Natural Gas #38 2.58 mm (non-CE D80GHP) |
| * | 810-2063 | Orifice, LP Gas #52 1.61 mm (SCFD80G) |
| * | 810-2060 | Orifice, G20/G25 Gas (CE only) |
| * | 810-2059 | Orifice, G31 (CE only) |
| 4 | 810-2032 | Pilot Burner, Natural/G20/25 Gas (primary and trailing) |
| * | 810-2155 | Pilot Burner, LP/G31 Gas (primary and trailing) |
| * | 812-1674 | Pilot Burner, Mod. Natural Gas (electronic ignition) |
| * | 809-0845 | Screw, 10-32 x $\frac{3}{8}$ " Hex Slotted Head (primary and trailing) |
| * | 812-1674 | Tube, Pilot Gas Supply, $\frac{1}{4}$ " x 23" (one-piece gasline) |
| * | 810-0705 | Tube, Pilot Gas Supply, $\frac{1}{4}$ " x 20" (one-piece gasline) |
| * | 810-0703 | Tube, Pilot Gas Supply, $\frac{1}{4}$ " x 17 $\frac{3}{4}$ " (one-piece gasline) |
| * | 810-2138 | Valve, Trailing Pilot, Adjustable (trailing pilot only) |
| 5 | 200-1314 | Manifold Support Bracket |
| * | 200-1615 | Manifold Support Bracket (right or left) |
| 6 | 210-5197 | Diffuser Assembly |
| 7 | ▶▶▶ | See Drain Manifold Components, Section 2.5 |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.1.5 Decathlon D80 Primary Components (cont.)

| ITEM | PART # | COMPONENT |
|------|------------|--|
| 8 | 810-2151 | Burner, Left Side |
| 9 | 810-2149 | Burner, Center |
| 10 | 810-2150 | Burner, Right Side |
| 11 | 200-2707 | Heat Shield |
| * | 200-1363 | Lower Heat Shield |
| 12 | 807-3552 | Gas Valve, Natural Gas Electronic Ignition, 24 VAC |
| * | 807-3628 | Gas Valve, LP Gas Electronic Ignition, 24 VAC |
| * | 810-2156 | Gas Valve, Natural Gas, 120 VAC |
| * | 810-2323 | Gas Valve, LP Gas, 120 VAC |
| * | 807-2091 | Gas Valve, G20/25 Gas, 24 VAC (CE only) |
| * | 807-2127 | Gas Valve, G31 Gas, 24 VAC (CE only) |
| * | 810-0691 | Vent Tube |
| 13 | 200-2686 | Channel, Front and Rear |
| 14 | 200-1675 | Lower Hinge Bracket |
| * | 823-5346 | Hinge, Lower Left |
| * | 823-5347 | Hinge, Lower Right |
| * | 823-5348 | Hinge, Upper Left |
| * | 823-5349 | Hinge, Upper Right |
| 15 | 211-2532 | Side Panel, Left Side (D80) |
| 16 | 212-2532 | Side Panel, Right Side (D80) |
| * | 201-4775 | Side Panel, Left Side with hole (SCFD80) |
| * | 202-4775 | Side Panel, Right Side with hole (SCFD80) |
| * | 211-4570 | Side Panel, Left Side without hole (SCFD80) |
| * | 212-4570 | Side Panel, Right Side without hole (SCFD80) |
| 17 | 824-0954 | Wireway, Control Panel |
| 18 | 210-2778 | Control Panel, One Hole (D80) |
| * | 210-2777 | Control Panel, Two Holes (D80) |
| * | 210-5061 | Control Panel, One Hole (SCFD80) |
| * | 210-5910 | Control Panel, Two Holes (SCFD80) |
| 19 | ▶▶▶ | See Optional Components, Section 2.3 |
| 20 | 824-0986 | Top Cap (D80/CFD80) |
| * | 824-1013 | Top Cap, 2-battery (SCFD80) |
| * | 824-1007 | Top Cap, 3-battery (SCFD80) |
| * | 824-1006 | Top Cap, 4-battery (SCFD80) |
| 21 | 823-3659 | Flue Box Assembly (D280, SCFD280) |
| * | 106-1442SP | Flue Box Assembly (D380/480, CFD80, SCFD380/480) |
| * | 200-1347 | Front, Flue Box |
| * | 200-1349 | Back, Flue Box |
| * | 200-1316 | Shield, Flue Box |
| * | 200-3645 | Deflector, Flue |
| 22 | 823-3512 | Flue Cap (D80) |
| * | 823-3659 | Flue Cap (SCFD80) |
| 23 | 106-1698SP | Door Assembly |
| * | 210-1151 | Panel, Outer Door |
| * | 200-2688 | Panel, Inner Door |
| * | 810-0180 | Door Handle, Chrome |
| * | 809-0918 | Screw, 10-24 x 1/2" Slotted Head (use with 810-2105) |
| * | 809-0191 | Washer, 1/4" Spring-lock (use with 810-2105) |
| * | 200-1301 | Pin, Door, Long (D80) |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

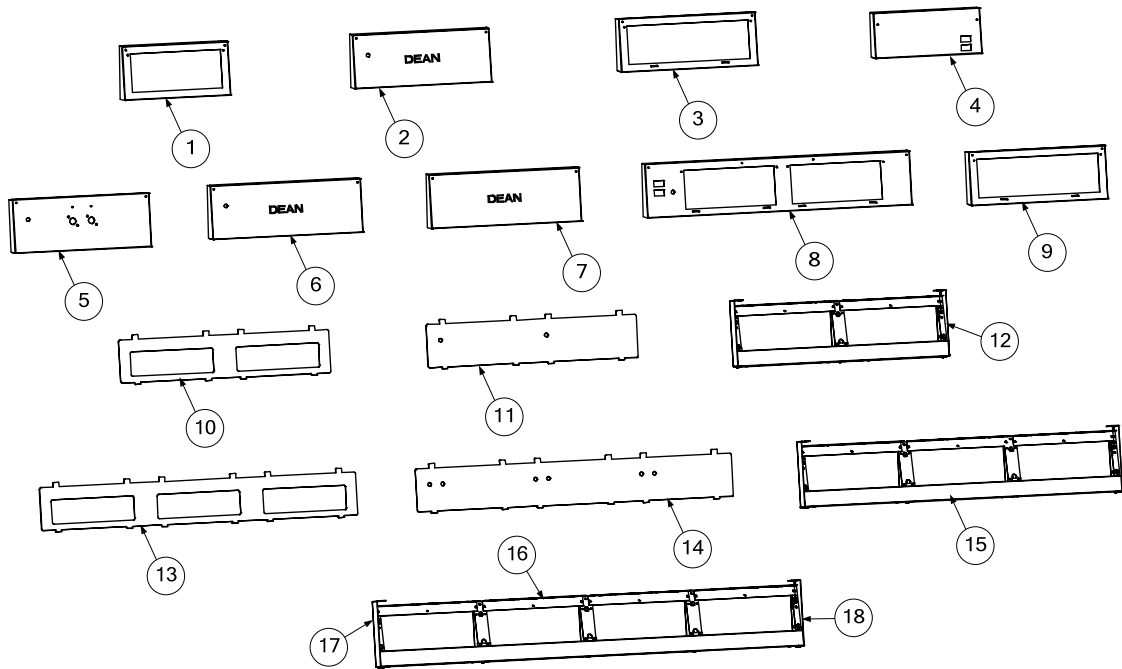
2.1.5 Decathlon D80 Primary Components (cont.)

| ITEM | PART # | COMPONENT |
|------|------------|--|
| * | 210-9889 | Pin, Door (SCFD80) |
| * | 810-0066 | Magnetic Catch, Door (D80) |
| * | 810-1105 | Magnetic Catch, Door (SCFD80) |
| 24 | 803-0304 | Fry Basket, 6 x 8 ³ / ₄ " x 16 ³ / ₄ " |
| 25 | 810-2122 | Grid Assembly (mesh-style) |
| * | 803-0300 | Grid Assembly (rack-style) |
| 26 | 200-3120 | Hanger, Basket, Single System, M/S (D80) |
| * | 210-2887 | Hanger, Basket, Single System, S/S, no splash guard (SCFD80) |
| * | 200-3119 | Hanger, Basket, Double System, M/S (D80) |
| * | 210-3117 | Hanger, Basket, Double System, S/S (SCFD80) |
| 27 | 810-0356 | Caster, Plate-mount, 5-inch without Brake |
| * | 810-2406 | Caster, Single Stud-mount, 5-inch without Brake |
| 28 | 810-0357 | Caster, Plate-mount, 5-inch with Brake |
| * | 810-2405 | Caster, Single Stud-mount, 5-inch with Brake |
| * | 826-1389 | Screw, 1/4-20 x 3/4" Hex Head (for plate-mount casters, qty: 10) |
| 29 | 812-1226SP | Drain Nipple, Extended, 1 1/4" |
| * | 812-1717SP | Drain Nipple, Extended, 1 1/2" |
| 30 | 106-0913SP | Cordset, 10' Power |
| 31 | 210-2804 | Cover, Outlet Duct |
| 32 | 200-2683 | Back, Upper Cabinet |
| * | 200-2982 | Back, Lower Cabinet |
| 33 | 810-2411 | Leg, Single Bolt Mount (black) |
| * | 806-3811 | Leg Package, 4 Bolt Mount (4 per set) |
| 34 | 823-3248 | Leg Support Assembly |
| 35 | 200-2734 | Burner Mounting Bracket |
| 36 | 823-3649 | Hanger, Basket with 6" Splash Guard |
| 37 | 810-0180 | Handle, Door, Chrome |
| 38 | N/A | Handle, Door, Euro-look (SCFD C/C) |
| 39 | N/A | Door Assembly (SCFD C/C) |
| 40 | N/A | Brace, Front Horizontal, Single (SCFD C/C) |

* Not illustrated.

DECATHLON SERIES GAS FRYERS CHAPTER 2: PARTS LIST

2.2 Control Panel Options, Joiner Strips, and Accessories

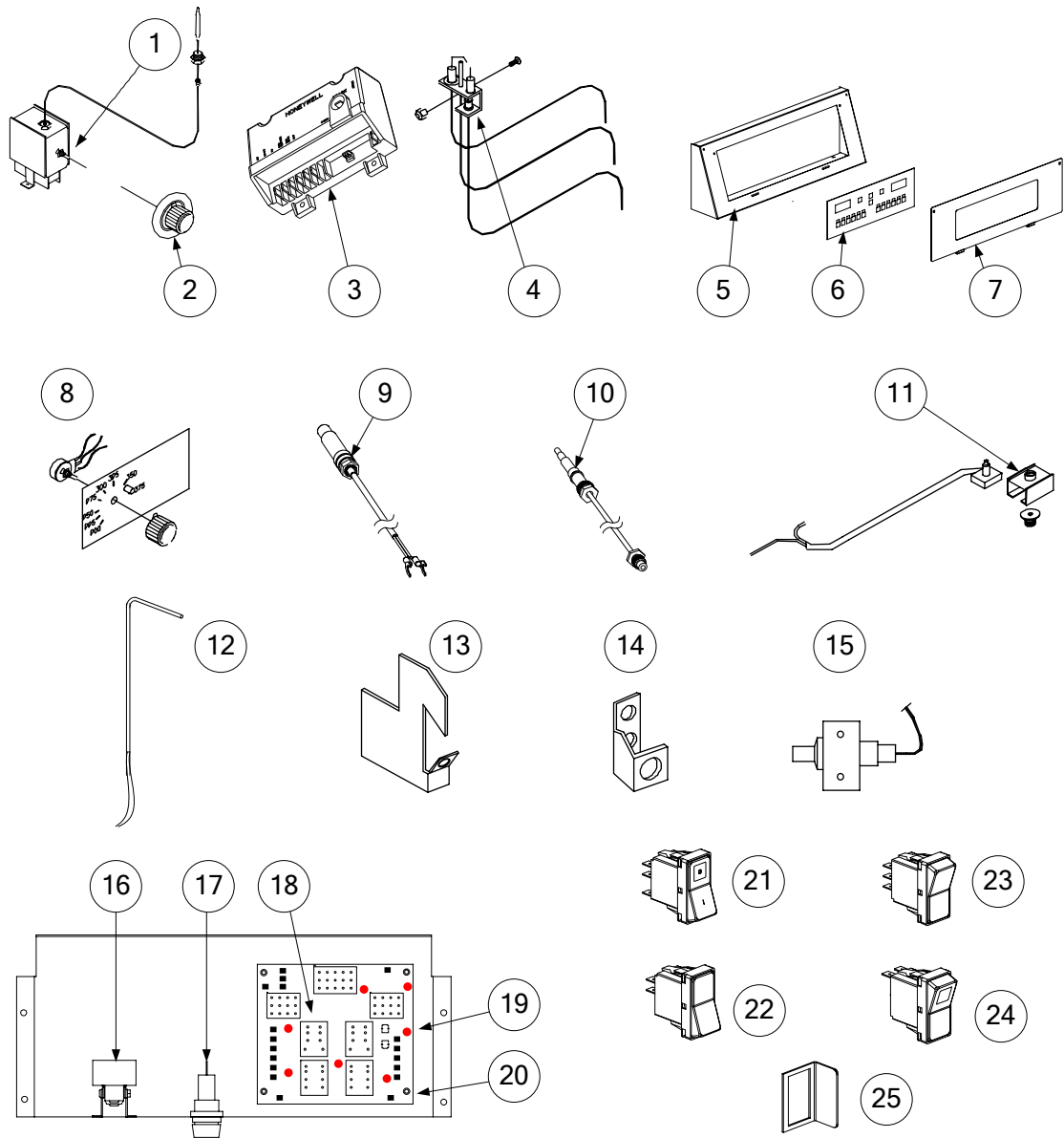


| ITEM | PART # | COMPONENT |
|-----------------------|------------|---|
| Control Panels | | |
| 1 | 210-3562 | Controller (D50) |
| 2 | 210-3021 | Solid, with Indicator Light (D60) |
| 3 | 210-6405 | Controller (D60, D65) |
| 4 | 210-2051 | McDonald's™ (D50) |
| 5 | 210-4672 | Basket Lift, with Thermatron Controller (D60) |
| 6 | 210-5061 | Solid, with Indicator Light (D80) |
| 7 | 210-5910 | Solid, for Matching Cabinet (D80) |
| 8 | 210-3910 | Controller (15MC/50/20) |
| 9 | 210-1256 | Controller (SCFD60/150) |
| 10 | 210-8552 | Controller, Euro-look Bezel (SCFD50 C/C) |
| 11 | 230-2146 | Solid, Euro-look Bezel (SCFD50 C/C) |
| 12 | 106-5909 | Frame, Euro-look, x2 (SCFD50 C/C) |
| 13 | 230-1948 | Controller, Euro-look Bezel (SCFD50 C/C) |
| 14 | 230-2149 | Solid, Euro-look Bezel (SCFD50 C/C) |
| 15 | 106-5927 | Frame, Euro-look, x3 (SCFD50 C/C) |
| 16 | 106-6332 | Frame, Euro-look, x4 (SCFD50 C/C) |
| 17 | 211-6640 | End, Frame, Left (SCFD50 C/C) |
| 18 | 212-6640 | End, Frame, Right (SCFD50 C/C) |
| Joiner Strips | | |
| | 210-4847 | D50/D50 |
| | 211-4816 | 2424/D50 |
| | 212-4816 | D50/2424 |
| | 210-3327 | D20/D50 |
| | 210-3017 | DD50/D60/D80 |
| | 210-1679 | SM/D220 |
| Accessories | | |
| * | 823-3938 | Crumb Scoop, Split Pot |
| * | 106-2631SP | Sediment Tray |
| * | 823-3947 | Chicken Crisper, D60 |

* Not illustrated.

DECATHLON SERIES GAS FRYERS CHAPTER 2: PARTS LIST

2.3 Optional Components and Controllers



| ITEM | PART # | COMPONENT |
|------|----------|--|
| 1 | 826-2013 | Thermostat, Sunne |
| 2 | 810-2035 | Knob, Thermostat |
| 3 | 826-2117 | Spark Module, Domestic and CE (Rajah Connector, 807-3484) |
| * | 807-3484 | Rajah Connector (for Blue/Gray Honeywell module, 807-4037, no longer avail.) |
| 4 | 807-1311 | Pilot Assembly, Natural Gas with Electronic Ignition |
| * | 807-1553 | Pilot Assembly, LP Gas with Electronic Ignition |
| * | 807-1315 | Ignition Cable (for computer operated fryers) |
| * | 810-0705 | Tube, 1/4" x 20" One Piece Pilot Gas Supply |
| * | 807-1310 | Flame Sensor |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.3 Optional Components and Controllers (cont.)

| ITEM | PART # | COMPONENT |
|------|------------|---|
| * | 803-0278 | Brush, L-shaped |
| * | 803-0197 | Fryer's Friend |
| * | 803-0293 | Gloves |
| * | 106-1839SP | Pilot Assembly (w/computer and electronic ignition), Natural |
| * | 106-1128 | Pilot Assembly (w/computer and electronic ignition), LP |
| * | 106-1235 | Pilot Assembly (without computer), Natural |
| * | KIT0092 | Air Shutter Kit |
| 5 | ▶▶▶ | See Control Panel Options, Section 2.2 |
| 6 | 826-2413 | Computer, Compu-Fry III.5, Full-vat |
| * | 806-8305 | Computer, CM4-S |
| * | 806-8308 | Computer, CM4-S (FPD65) |
| * | 806-5139 | Computer, Remote |
| * | 826-2414 | Computer, Compu-Fry III.5, Dual-vat |
| * | 806-4803 | Cable Assembly, Compu-Fry to Interface Board |
| 7 | 823-3776 | Bezel Assembly, pre Euro-look |
| * | ▶▶▶ | For Euro-look Bezels, See Control Panel Options, Section 2.2 |
| 8 | 106-0802SP | Face Plate/Potentiometer, 120 VAC Electronic Thermostat |
| * | 820-0135 | Face Plate, Electronic Thermostat |
| * | 106-0801 | Potentiometer, Electronic Thermostat (molex connector; with trim resistor) |
| * | 106-5809 | Potentiometer, Electronic Thermostat (molex connector; without trim resistor) |
| * | 816-0534 | Knob, Control, Electronic Thermostat |
| 9 | 807-3485 | Thermopile |
| * | 807-1026 | Sound Device |
| * | 806-4803 | Cable Assembly (Harness) |
| 10 | 812-1284 | Thermocouple (CE ONLY) |
| * | 807-3550 | Thermocouple |
| 11 | 106-1768SP | ECO Connector, Honeywell Valves Only (CE ONLY) |
| * | 810-2398 | ECO Connector, Robertshaw Valves Only (CE ONLY) |
| 12 | 106-5419SP | Probe Assembly, GO (D20, D50, D60, D80) |
| * | 106-1976 | Probe Assembly, Temperature, New Design, 4-pin (D60 & D80) |
| * | 106-1424 | Probe Assembly (RTD), Temperature (Dean computer) |
| * | 106-1261SP | Harness Assembly, GO Probe |
| * | 810-2164 | Spring, Space, Electronic Thermostat Probe |
| * | 210-1386 | Clamp, Electronic Thermostat Probe |
| 13 | 210-6564 | Bracket, Pilot Thermocouple |
| 14 | 810-2401 | Bracket, Thermopile |
| 15 | 810-1001 | Piezo Ignitor (trigger) |
| * | 200-1868 | Piezo Bracket |
| * | 807-3540 | Electrode, Piezo |
| 16 | 807-3560 | High-limit Thermostat, Manual Reset 410° F (CE) |
| * | 807-3680 | High-limit Thermostat, Manual Reset 450° F (NON-CE, 1998-present) |
| * | 807-3559 | High-limit Thermostat, Manual Reset 435° F (pre-1998) |
| * | 810-2046 | Spring, Spacer, High-limit Capillary Bulb |
| * | 810-2047 | Spring, Spacer, Thermostat Capillary Bulb |
| * | 210-1433 | Clamp, Thermostat/High-limit Capillary Bulb |
| 17 | 807-1321 | Fuse Holder, Buss |
| * | 2747 | Fuse Holder, Slot-head, Safety (CE ONLY) |
| * | 807-3592 | Fuse 2A Slow-blow (230V systems) |
| * | 807-3750 | Fuse 5A (120V systems) |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.3 Optional Components and Controllers (cont.)

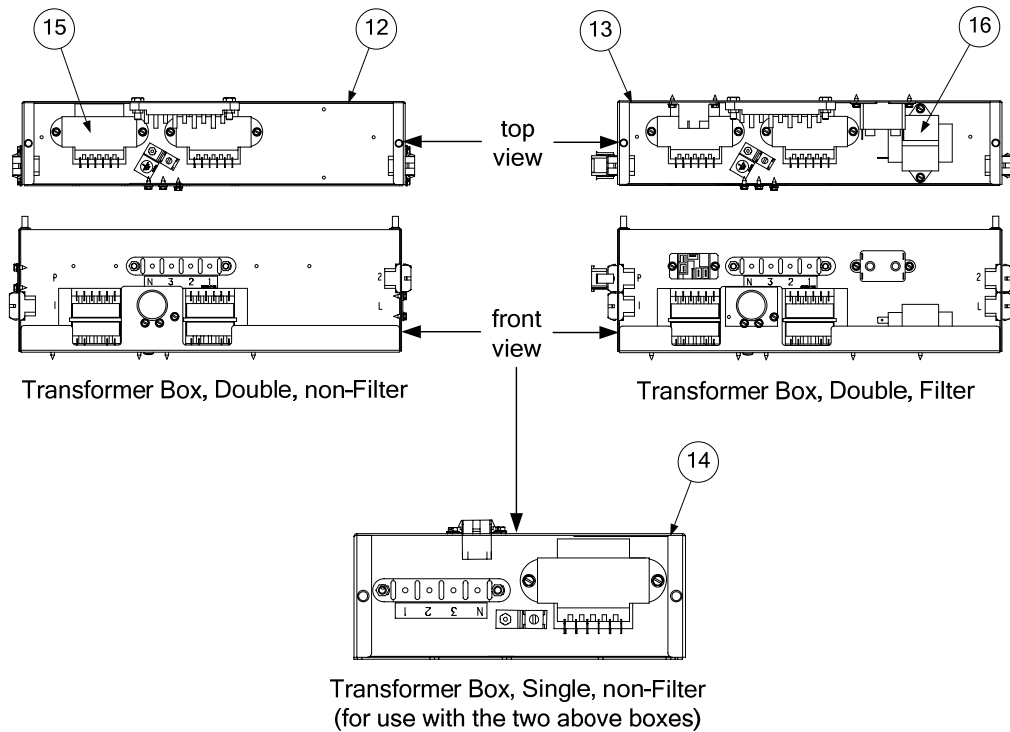
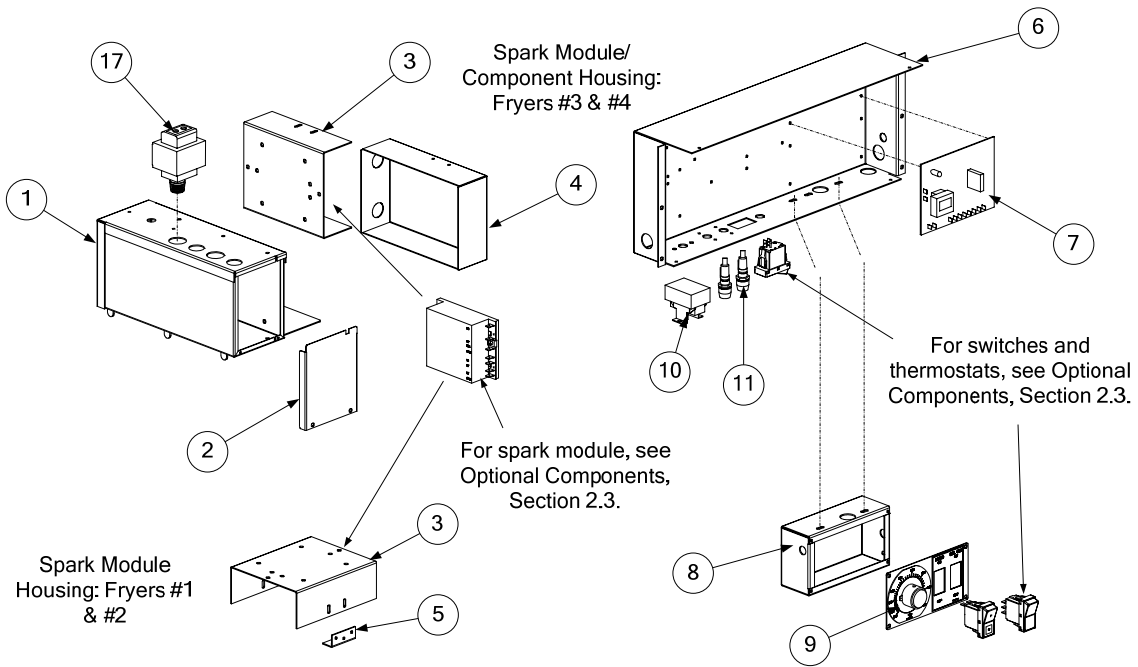
| ITEM | PART # | COMPONENT |
|-------------|---------------|--|
| 18 | 106-6710 | Interface Board, Dean Computer Only |
| 19 | 807-0834 | Relay, 12VDC 15A 1PDT (basket lift) |
| 20 | 807-0833 | Relay, 12VDC 5A 1PDT (latching) |
| * | 807-4114 | Relay, 24VAC Coil, Reset |
| 21 | 807-3574 | Switch, Power (green lens) |
| 22 | 807-3580 | Switch, Rocker, Manual Filter Power |
| 23 | 807-3579 | Switch, Six-terminal Boil-out |
| 24 | 807-3576 | Switch, Fryer Reset (momentary) |
| * | 807-3578 | Switch, 3-position, ON-OFF-ON |
| * | 807-3582 | Indicator Light, Green (120V) |
| * | 807-4112 | Indicator Light, Green (24V) |
| * | 807-3581 | Indicator Light, Red (120V) |
| * | 807-3611 | Pump Relay |
| * | 807-3578 | Socket, Pump Relay |
| * | 807-3575 | Switch Insert, Blank |
| 25 | 210-2786 | Switch Guard (for Items 22-25, optional) |

* Not illustrated.

DECATHLON SERIES GAS FRYERS

CHAPTER 2: PARTS LIST

2.4 Transformers & Component Boxes; Multi-batteried Decathlons



**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.4 Transformers & Component Boxes; Multi-batteried Decathlons (cont.)

| ITEM | PART | COMPONENT |
|-------------|-------------|---|
| 1 | 823-3242 | Control Box (D50/CFD50/SCFD50) |
| * | 106-2691 | Control Box (FPD65) |
| 2 | 210-1364 | Plate, Face (for Item 1) |
| * | 210-2966 | Plate, Face (for Item 1, FPD65) |
| 3 | 200-1322 | Bracket, Spark Module |
| 4 | 200-1326 | Cover, Spark Module (Fryers 3 & 4) |
| 5 | 200-2307 | Bracket, Spark Module Attachment (Fryers 1 & 2) |
| 6 | 824-0961 | Wireway, Control Panel (D50) |
| * | 824-0951 | Wireway, Control Panel (D60) |
| * | 824-1195 | Wireway, Control Panel (SCFD models) |
| * | 824-1162 | Wireway, Control Panel (D80) |
| 7 | 826-2086 | Thermatron Board, 115/230V |
| * | 106-3729 | Thermatron Board, 24V, Melt Cycle |
| * | 826-2088 | Kit, Thermatron, 24V |
| * | 826-2031 | Kit, Thermatron, 115/220V |
| 8 | 200-3212 | Housing, Electronic Thermostat, Two Cut-outs |
| 9 | 210-3214 | Plate, Face, Electronic Thermostat, Power/Boil-out |
| * | 807-3536 | Potentiometer, Electronic Thermostat (spade terminals; with trim resistor) |
| * | 106-0801 | Potentiometer, Electronic Thermostat (molex connector; with trim resistor) |
| * | 106-5809 | Potentiometer, Electronic Thermostat (molex connector; without trim resistor) |
| * | 816-0534 | Knob, Electronic Thermostat Potentiometer |
| 10 | 807-3680 | High-limit Thermostat, Manual Reset 450° F (non-CE only) |
| * | 807-3559 | High-limit Thermostat, Manual Reset 435° F |
| * | 807-3560 | High-limit Thermostat, Manual Reset 410° F (CE only) |
| * | 106-1131SP | Harness, Spark Module |
| * | 807-3577 | Circuit Breaker, 7 amp |
| 11 | 807-3592 | Fuse, 2A, Slow Blow |
| 12 | 106-7594 | Transformer Box Assembly, Double, non-Filter (SCFD C/C 250/350) |
| * | 823-6066 | Box, Transformer Box Assembly |
| * | 220-2277 | Lid, Transformer Box Assembly |
| 13 | 106-7549 | Transformer Box Assembly, Double, Filter (SCFD C/C 250/350) |
| * | 823-6066 | Box, Transformer Box Assembly |
| * | 220-2277 | Lid, Transformer Box Assembly |
| 14 | 106-6616 | Transformer Box Assembly, Single, non-Filter (SCFD C/C 250/350) |
| * | 823-6167 | Box, Transformer Box Assembly |
| * | 220-2537 | Lid, Transformer Box Assembly |
| 15 | 807-2176 | Transformer, V/F Dual Voltage (for all SCFD C/C units, one per frypot) |
| 16 | 807-0800 | Transformer, 120V/24 VAC (for filtration units) |
| 17 | 807-3551 | Transformer, 72D-1089 CL 2 |

* Not illustrated.

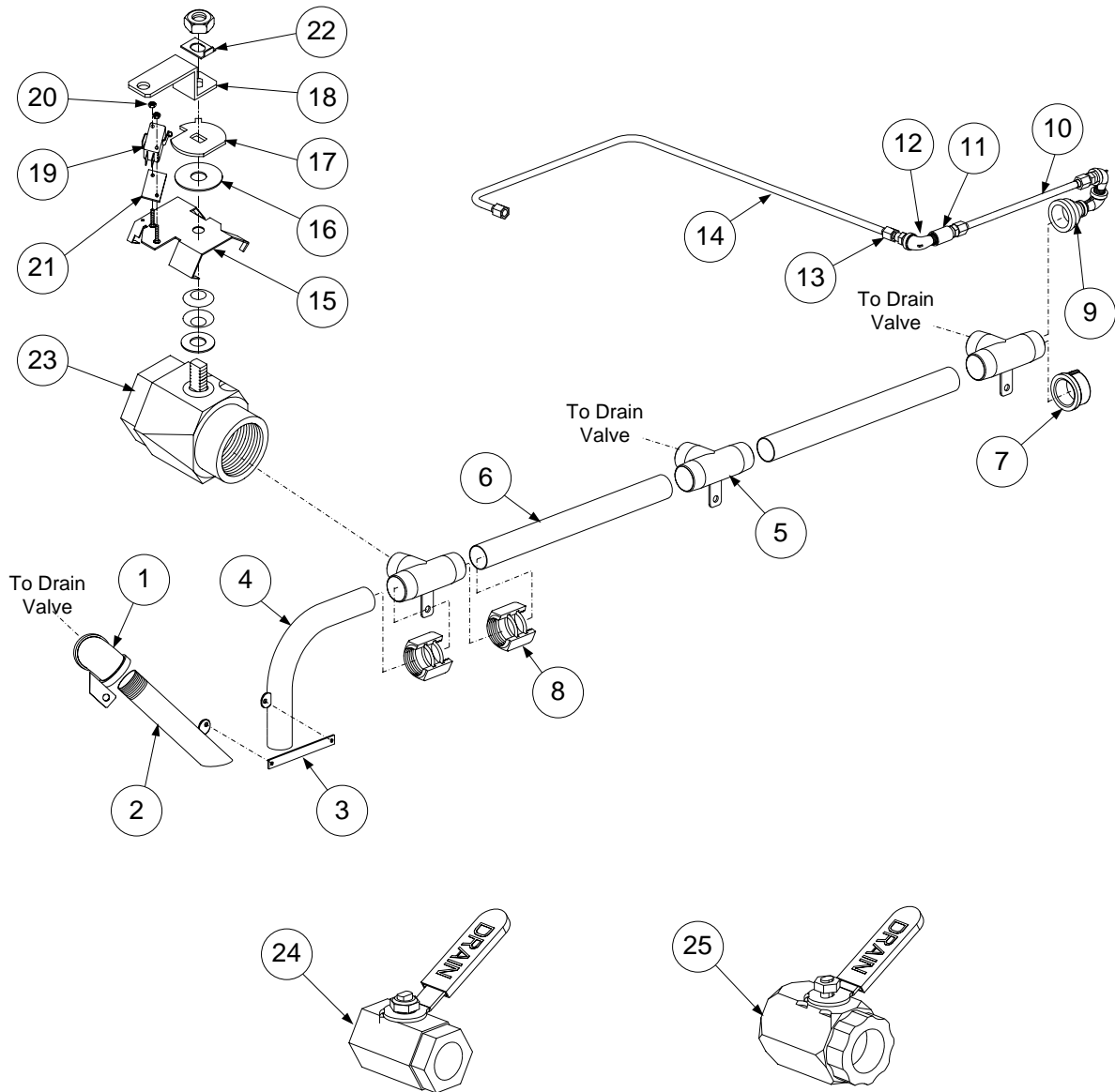
DECATHLON SERIES GAS FRYERS

CHAPTER 2: PARTS LIST

Some Decathlon series fryers are equipped with 3" round drain systems while others are equipped with 1.5" round drain systems. Compare the fryer in question with the illustrations on pages 2-20 to 2-23 to determine which system it uses.

2.5 Oil Drain Manifold Components

2.5.1 1.5" Oil Drain Manifold, Drain Flush, and Drain Valve Components



**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

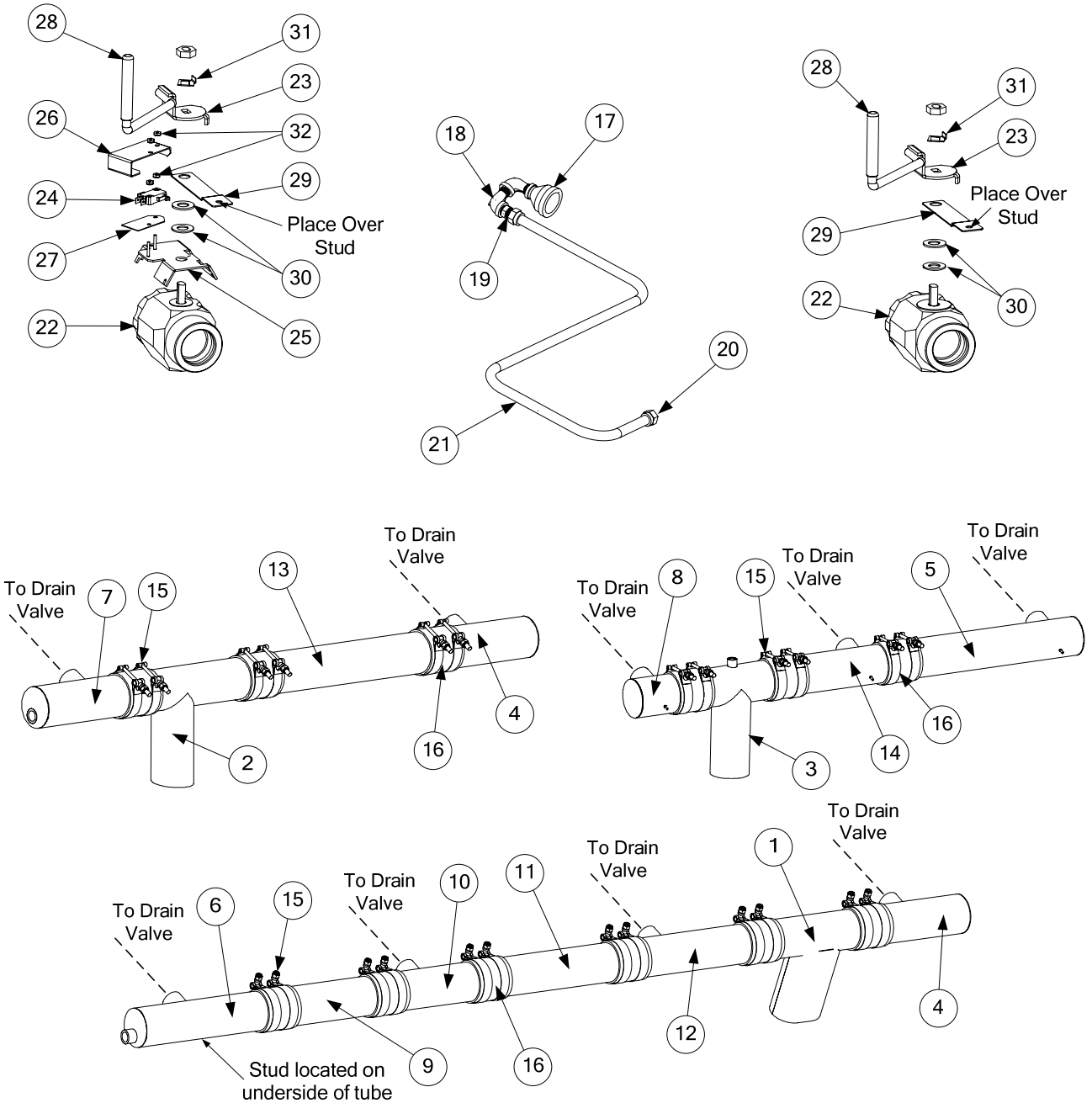
2.5.1 1.5" Oil Drain Manifold, Drain Flush, and Drain Valve Components (cont.)

| ITEM | PART # | COMPONENT |
|-------------------------------|----------|---|
| 1 | 823-3221 | Elbow with Bracket, Left |
| * | 823-3222 | Elbow with Bracket, Right |
| 2 | 823-5167 | Drain Pipe, Left Side |
| 3 | 210-2311 | Clamp, Center Drain Pipe |
| 4 | 823-4931 | Drain Pipe, Right Side |
| 5 | 813-0749 | Tee, 1½" NPT With Handle Bracket |
| 6 | 200-5621 | Drain Manifold Tube, 17" |
| * | 200-1827 | Drain Manifold Tube, 13" |
| 7 | 813-0659 | Pipe Cap, 1½" |
| * | 813-0391 | Nipple, 1 ¼" x Close |
| * | 813-0748 | Tee, 1 ½" NPT x 1 ¼" NPT (with handle bracket) |
| 8 | 809-0884 | Nut, Slip-joint 1½" |
| * | 816-0544 | O-ring, Slip-joint Nut |
| 9 | 813-0686 | Bell Reducer, 1½" x ½" NPT |
| 10 | 810-1057 | Flex Line, ⅝" x 13" |
| 11 | 813-0051 | Coupling, ½" NPT |
| 12 | 813-0165 | Elbow, Street ½" x ½" 90° |
| 13 | 810-1668 | Adapter, ⅝" O.D. x ½" Male (use with 810-1057 and 810-1069) |
| * | 810-1669 | Adapter, ⅝" O.D. x ½" Female (use with 810-1057 and 810-1069) |
| 14 | 810-1069 | Flex Line, ⅝" x 29½" |
| * | 806-6849 | Tilt Switch, Drain Valve |
| DRAIN VALVE COMPONENTS | | |
| 15 | 106-1401 | Bracket, Microswitch (optional on some units) |
| 16 | 200-1617 | Washer, Drain Valve (use without microswitch) |
| 17 | 210-2029 | Bracket, Microswitch Activator |
| 18 | 210-4727 | Handle (Actuator), Drain Valve, Round |
| * | 823-3405 | Handle (Actuator), Drain Valve, Flat |
| * | 823-3440 | Handle, Push/Pull Drain |
| * | 809-0885 | Washer, ⅜" x 1 x .083" |
| * | 809-0843 | Cotter Pin |
| * | 816-0547 | Cap, Red Vinyl for Handle |
| 19 | 807-2104 | Microswitch (optional on some units) |
| 20 | 809-0842 | Nut, Nylock #4-40 (microswitch to bracket) |
| 21 | 816-0220 | Insulation, Microswitch |
| 22 | 200-1257 | Retainer, Nut |
| 23 | 810-2127 | Drain Valve, 1½" Full Port (with washers & nut) |
| 24 | 810-2052 | Drain Valve, 1¼" (1" standard port) |
| * | 810-1338 | Drain Valve, 1" (D20 only) |
| * | 200-2371 | Handle, Valve Lever (for use with 810-1338 and 823-3440 only) |
| 25 | 810-2126 | Drain Valve, 1¼", Full Port |
| * | 810-1018 | Drain Valve, 1¼", Left |
| * | 210-2342 | Drain Extension, Left |
| * | 210-2343 | Drain Extension, Right |

* Not illustrated.

DECATHLON SERIES GAS FRYERS CHAPTER 2: PARTS LIST

2.5.2 3" Oil Drain Manifold, Drain Flush, and Drain Valve Components



| ITEM | PART # | COMPONENT |
|------|----------|---|
| 1 | 823-4712 | Tube, 3" Oval Dump |
| 2 | 812-1901 | Tube, 3" Downspout |
| 3 | 823-5912 | Tube, 3" Off-set Downspout |
| 4 | 823-4681 | Tube, 3" Right Drain (8.06" long, closed end) |
| 5 | 823-6079 | Tube, 3" Right Drain (15.44" long, closed end) |
| 6 | 823-4844 | Tube, 3" Left Drain (12.44" long, closed end) |
| 7 | 823-4680 | Tube, 3" Left Drain (8.56" long, closed end w/coupling) |

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.5.2 3" Oil Drain Manifold, Drain Flush, and Drain Valve Components (cont.)

| ITEM | PART # | COMPONENT |
|------|------------|--|
| 8 | 823-6076 | Tube, 3" Left Drain (3.86" long, closed end) |
| 9 | 200-9365 | Tube, 3" Joiner (9.13" long, open ends) |
| 10 | 823-4682 | Tube, 3" Center Drain (8" long, open ends) |
| 11 | 200-6603 | Tube, 3" Joiner (11.5" long, open ends) |
| 12 | 823-5188 | Tube, 3" Right Filter (10.38" long, open ends) |
| 13 | 200-6752 | Tube, 3" Joiner, Matching Cabinet (15.25" long, open ends) |
| 14 | 823-6078 | Tube, 3" Center Drain (8.10" long, open ends) |
| 15 | 809-0969 | Clamp, T-bolt |
| 16 | 816-0625 | Boot/Sleeve |
| * | 106-2568SP | Wash Down Hose Assembly |
| * | 106-1837 | Quick Disconnect, Female |
| * | 813-0699 | Quick Disconnect, Male |
| * | 810-1434 | Hose Assembly |
| * | 106-1454 | Nozzle Assembly, Hose with Handle |
| * | 106-2387 | Heater Strip, 120V, 25W, 36" |
| | 106-1726 | Flush Oil Drain Line |
| 17 | 813-0686 | Bell Reducer, 1 1/2" x 1/2" |
| 18 | 813-0165 | Elbow, Street 1/2" x 1/2" NPT 90° BM |
| 19 | 810-1669 | Adapter, Female 5/8" O.D. x 1/2" Long |
| 20 | 810-1668 | Adapter, Male 5/8" O.D. x 1/2" Long |
| 21 | 810-1056 | Flexline, 5/8" O.D. x 52.5" Long |
| | 106-3976 | Drain Valve Assembly, 1 1/2" without Microswitch |
| | 106-3977 | Drain Valve Assembly, 1 1/2" with Microswitch |
| 22 | 810-2783 | Drain Valve, 1 1/2" Full Port with O-ring |
| 23 | 823-4734 | Handle, Drain Valve Rotating |
| 24 | 807-2104 | Microswitch, CE Micro-roller Lever |
| 25 | 106-1401 | Microswitch Bracket Assembly |
| 26 | 200-4402 | Guard, Drain Microswitch |
| 27 | 816-0220 | Insulation, RF Switch |
| 28 | 816-0547 | Cap, Red Vinyl for Handle |
| 29 | 200-6116 | Strap, 1 1/2" (holds tube to valve via the stud) |
| 30 | 200-1617 | Washer, Drain Microswitch |
| 31 | 200-1257 | Retainer, Drain Valve |
| 32 | 826-1366 | Nut, 4-40 Keps Hex w/External Teeth (pkg. of 25) |
| * | 816-0630 | Cap, Vinyl (one per clamp, covers T-bolt threads) |
| * | 106-3978 | Drain Valve Assembly, 1 1/2" without Microswitch (SCFD C/C) |
| * | 106-3979 | Drain Valve Assembly, 1 1/2" with Microswitch (SCFD C/C) |
| * | 810-2784 | Drain Valve, 1 1/4" Full Port with O-ring |
| * | 823-5532 | Handle, Drain Valve Rotating |
| * | 807-2104 | Microswitch, CE Micro-roller Lever |
| * | 106-6020 | Microswitch Bracket Assembly |
| * | 220-0143 | Guard, Drain Microswitch |
| * | 816-0220 | Insulation, RF Switch |
| * | 816-0547 | Cap, Red Vinyl for Handle |
| * | 200-6795 | Strap, 1 1/2" (holds tube to valve via the stud) |
| * | 809-0988 | Washer, Drain Microswitch |
| * | 200-1257 | Retainer, Drain Valve |
| * | 826-1366 | Nut, 4-40 Keps Hex w/External Teeth (pkg. of 25) |
| * | 816-0630 | Cap, Vinyl (one per clamp, covers T-bolt threads) |

* Not illustrated.

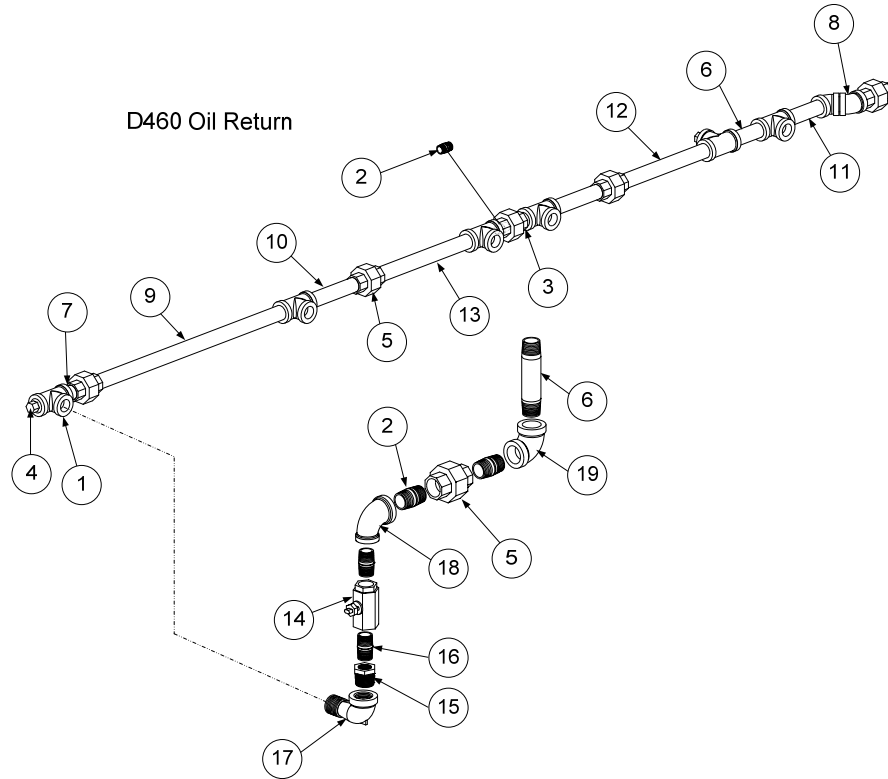
DECATHLON SERIES GAS FRYERS

CHAPTER 2: PARTS LIST

Decathlon series fryers differ in oil return configuration. Compare the fryer in question with the illustrations on pages 2-24 to 2-31 to determine which system it uses.

2.6 Oil Return Manifold Components

2.6.1 Oil Return Manifold Components; D & FPD65 Models

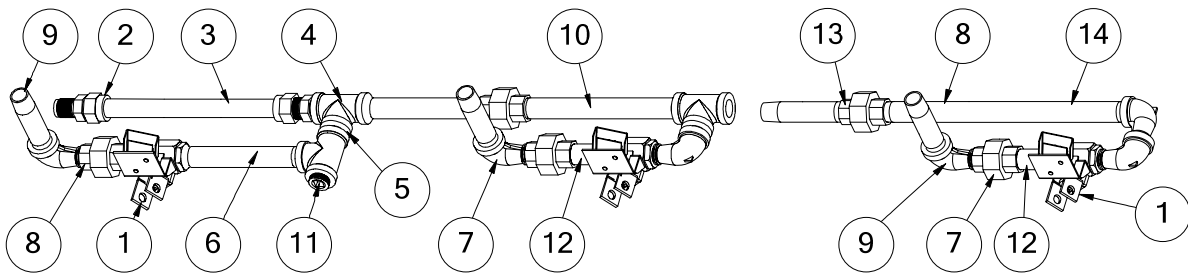


| ITEM | PART # | COMPONENT |
|------|----------|---|
| 1 | 813-0003 | Tee, $\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ " NPT BM |
| 2 | 813-0022 | Nipple, $\frac{1}{2}$ " NPT x Close BM |
| 3 | 813-0087 | Nipple, $\frac{1}{2}$ " NPT x $1\frac{1}{2}$ " BM |
| 4 | 813-0156 | Plug, $\frac{1}{2}$ " NPT Hex Head BM |
| 5 | 813-0173 | Union, $\frac{1}{2}$ " NPT BM |
| 6 | 813-0247 | Nipple, $\frac{1}{2}$ " NPT x $3\frac{1}{2}$ " BM |
| 7 | 813-0298 | Nipple, $\frac{1}{2}$ " NPT x 2" BM |
| 8 | 813-0345 | Elbow, $\frac{1}{2}$ " NPT 45° BM |
| 9 | 813-0368 | Nipple, $\frac{1}{2}$ " NPT x 16" BM |
| 10 | 813-0646 | Nipple, $\frac{1}{2}$ " NPT x 5" BM |
| 11 | 813-0654 | Nipple, $\frac{1}{2}$ " x 4" NPT BM |
| 12 | 813-0672 | Nipple, $\frac{1}{2}$ " x 8" NPT BM |
| 13 | 813-0673 | Nipple, $\frac{1}{2}$ " x $8\frac{1}{2}$ " NPT BM |
| 14 | 810-2125 | Oil Return Valve, $\frac{3}{8}$ " |
| * | 200-1143 | Retainer, Oil Return Valve Nut |
| * | 809-0877 | Nut, Oil Return Valve |
| 15 | 813-0006 | Bushing, Hex $\frac{1}{2}$ " x $\frac{3}{8}$ " NPT BM |
| 16 | 813-0625 | Nipple, $\frac{3}{8}$ " x Close NPT BM |
| 17 | 813-0165 | Elbow, Street $\frac{1}{2}$ " x $\frac{1}{2}$ " NPT 90° BM |
| 18 | 813-0634 | Elbow, $\frac{1}{2}$ " x $\frac{3}{8}$ " NPT 90° BM |
| 19 | 813-0062 | Elbow, $\frac{1}{2}$ " NPT 90° BM |

* Not illustrated

DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST

2.6.2 Oil Return Manifold Components; SCFD, CFD, & FPD65 Models



| ITEM | PART # | COMPONENT |
|------|----------|---|
| | 106-4100 | Oil Return Assembly – Middle |
| | 106-4101 | Oil Return Assembly – End |
| | 106-6763 | Oil Return Assembly – SCFD C/C |
| | 106-5616 | Oil Return Assembly – SCFD250P00001 (C/C) |
| | 810-3117 | Oil Return Manifold, SCFD250 C/C |
| | 810-3115 | Oil Return Manifold, SCFD350 C/C |
| 1 | 106-4006 | Valve Assembly, 1/2" Oil Return (see Page 2-30) |
| * | 106-3997 | Valve Assembly (use with wand) |
| * | 106-5516 | Valve Assembly, 3-way Oil Return |
| * | 106-5231 | Valve Assembly, FPD |
| 2 | 810-1668 | Adapter, Male 5/8" OD x 1/2" |
| 3 | 810-2320 | Flexline, 5/8" x 9.00" Long |
| 4 | 813-0003 | Tee, 1/2" x 1/2" x 1/2" BM |
| 5 | 813-0022 | Nipple, 1/2" x Close NPT BM |
| 6 | 813-0096 | Nipple, 1/2" x 6.00" NPT BM |
| 7 | 813-0165 | Elbow, Street 1/2" x 1/2" NPT 90° BM |
| 8 | 813-0173 | Union, 1/2" NPT |
| 9 | 813-0247 | Nipple, 1/2" x 3.50" NPT BM |
| 10 | 813-0362 | Nipple, 1/2" NPT x 7.50" BM |
| 11 | 813-0463 | Plug, 1/2" Counter Sink |
| 12 | 813-0661 | Nipple, 1/2" x 2.25" NPT BM |
| 13 | 813-0654 | Nipple, 1/2" x 4.00" NPT BM |
| 14 | 813-0597 | Nipple, 1/2" x 11.50" NPT BM |
| * | 210-8790 | Bracket, Return/Flush Retainer |
| * | 200-9295 | Handle, Oil Return Valve |
| * | 816-0638 | Cap, Yellow Vinyl, 5/16" x 3" |
| * | 810-2125 | Ball Valve, 3/8" Drain |
| * | 809-0601 | Clip, Clevis, Left Rod End |
| * | 813-0006 | Bushing, 1/2" to 3/8" NPT BM Hex Reducing |
| * | 813-0062 | Elbow, 1/2" 90° BM |
| * | 810-1067 | Flexline, 8.5" Oil Return |
| * | 810-1055 | Flexline, 11.5" Oil Return |
| * | 810-1339 | Flexline, 4.5" Oil Return |
| * | 810-1400 | Flexline, 21.00" Oil Return |
| * | 810-1056 | Flexline, 52.5" Oil Return |
| * | 810-2320 | Flexline, 9.00" Oil Return |
| * | 813-0087 | Nipple, 1/2" x 1.50" NPT BM |
| * | 813-0460 | Nipple, 1/2" x 3.00" NPT BM |
| * | 813-0625 | Nipple, 3/8" NPT x CL Black CLS |
| * | 813-0672 | Nipple, 1/2" x 8.00" NPT BM |
| * | 813-0607 | Nipple, 1/2" x 23.5" NPT BM |
| * | 813-0099 | Nipple, 1/2" x 7.00" NPT BM |
| * | 813-0845 | Nipple, 1/2" x 29.75" NPT BM |
| * | 813-0646 | Nipple, 1/2" x 5.00" NPT BM |
| * | 813-0373 | Nipple, 1/2" x 11.00" NPT BM |

DECATHLON SERIES GAS FRYERS CHAPTER 2: PARTS LIST

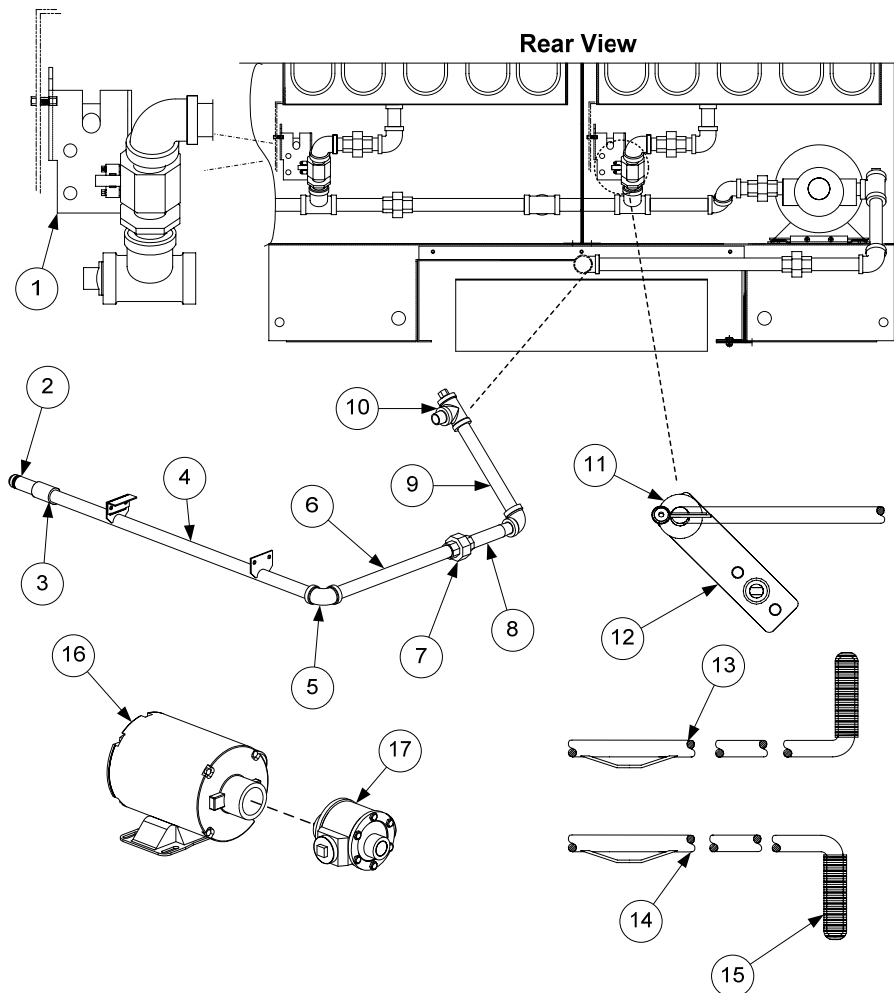
| | | |
|---|----------|------------------------------|
| * | 813-0298 | Nipple, 1/2" x 2.00" NPT BM |
| * | 813-0098 | Nipple, 1/2" x 6.50" NPT BM |
| * | 813-0742 | Nipple, 1/2" x 5.50" NPT BM |
| * | 813-0515 | Nipple, 1/2" x 12.00" NPT BM |
| * | 813-0265 | Nipple, 1/2" x 2.50" NPT BM |
| * | 813-0093 | Nipple, 1/2" x 4.00" NPT BM |
| * | 813-0281 | Nipple, 1/2" x 5.00" NPT BM |
| * | 813-0368 | Nipple, 1/2" x 16.00" NPT BM |
| * | 813-0644 | Nipple, 3/8" x 1.5" NPT BM |
| * | 813-0673 | Nipple, 1/2" x 8.5" NPT BM |
| * | 813-0698 | Nipple, 1/2" x 10.5" NPT BM |

* Not illustrated.

Decathlon series fryers differ in oil return configuration. Compare the fryer in question with the illustrations on pages 2-24 to 2-31 to determine which system it uses.

2.7 Oil Return and Oil Flush Components

2.7.1 Oil Return and Oil Flush Components; D & FPD65 Models



**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

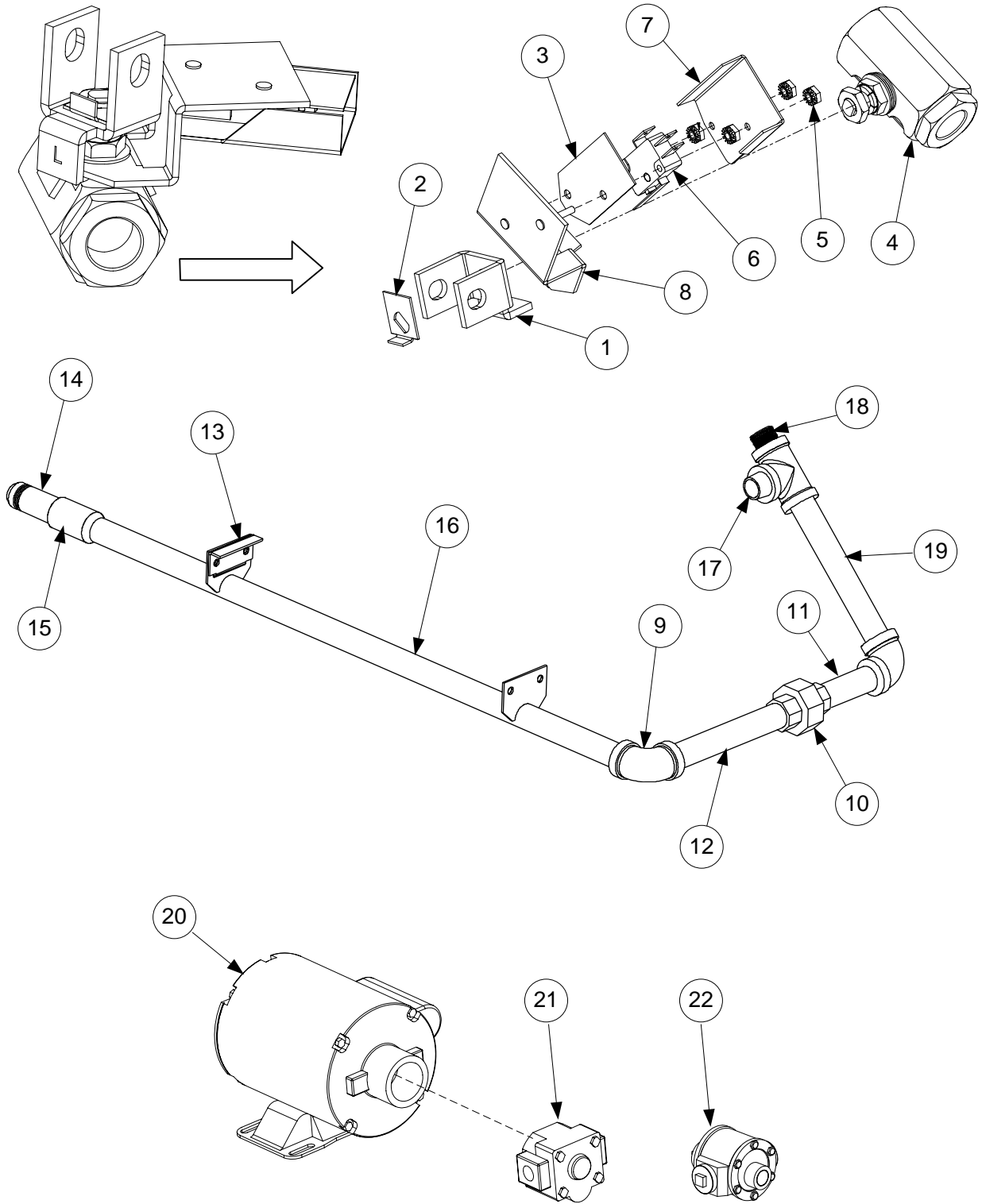
2.7.1 Oil Return and Oil Flush Components; D & FPD65 Models (cont.)

| ITEM | PART # | COMPONENT |
|------|----------|--|
| 1 | | Microswitch Bracket Assembly, Oil Return |
| | 106-1824 | Bracket, Oil Return Microswitch, Left |
| | 106-3595 | Bracket, Oil Return Microswitch, Right |
| | 201-4455 | Bracket, Oil Return Microswitch, Left (FPD) |
| | 202-4455 | Bracket, Oil Return Microswitch, Right (FPD) |
| | 810-2144 | Spacer, 4-40 $\frac{1}{4}$ " x $\frac{3}{8}$ " Aluminum |
| | 807-2104 | Microswitch, Oil Return |
| | 809-0846 | Screw, 4-40 x 1" Slotted Head |
| | 809-0842 | Nut, 4-40 Nylock |
| | 200-1341 | Bracket, Microswitch Rod |
| | 809-0360 | Screw, #8 x $\frac{3}{8}$ " Hex Washer Slotted Head |
| | 826-1389 | Screw, $\frac{1}{4}$ -20 x $\frac{3}{4}$ " Hex Head |
| | 809-0428 | Screw, $\frac{1}{4}$ -20 x $\frac{1}{2}$ " Hex Head |
| | 809-0823 | Nut, $\frac{1}{4}$ -20 Nylock |
| | 809-0070 | Nut, $\frac{1}{4}$ -20 Hex SS |
| 2 | 810-0697 | Disconnect, Male Suction Tube |
| * | 826-1392 | O-rings, for Male Disconnect (<i>pack of 5</i>) |
| 3 | 813-0608 | Coupling, Full, $\frac{1}{2}$ " NPT BM |
| 4 | 823-3188 | Suction Manifold Assembly |
| 5 | 813-0062 | Elbow, 90° BM |
| 6 | 813-0515 | Nipple, $\frac{1}{2}$ " NPT x 12" BM |
| 7 | 813-0173 | Union, $\frac{1}{2}$ " NPT BM |
| 8 | 813-0251 | Nipple, $\frac{1}{2}$ " NPT x 4 $\frac{1}{2}$ " BM |
| 9 | 813-0672 | Nipple, $\frac{1}{2}$ " NPT x 8" BM |
| 10 | | Oil Suction Start Fitting |
| * | 813-0022 | Nipple, $\frac{1}{2}$ " NPT x Close |
| * | 813-0156 | Plug, $\frac{1}{2}$ " NPT Hex Head |
| * | 813-0003 | Tee, $\frac{1}{2}$ " NPT BM |
| 11 | 809-0885 | Washer, $\frac{3}{8}$ " x 1" x .083" |
| * | 809-0843 | Cotter Pin, Plated |
| 12 | 823-3344 | Handle (Actuator), Oil Return Valve |
| 13 | 823-3187 | Handle, Oil Return Left Fryer (UFF System) |
| 14 | 823-3198 | Handle, Oil Return Right Fryer (UFF System, Fryer 3 & 4) |
| * | 823-3481 | Handle, Oil Flush Valve |
| * | 816-0547 | Cap, Drain Valve Handle, Red |
| 15 | 816-0548 | Cap, Oil Return Handle, Yellow |
| * | 816-0638 | Cap, Oil Return Handle, Yellow (SCFD C/C) |
| * | 816-0549 | Cap, Oil Flush Handle, Blue |
| 16 | 810-2100 | Motor, Pump 120-230V |
| 17 | 810-2098 | Pump, 8 GPM |
| * | 810-2252 | Pump, Chili's, 5 GPM |

* Not illustrated.

DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST

2.7.2 Oil Return and Oil Flush Components; SCFD, CFD, & FPD65 Models



**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.7.2 Oil Return and Oil Flush Components; SCFD, CFD, & FPD65 Models (cont.)

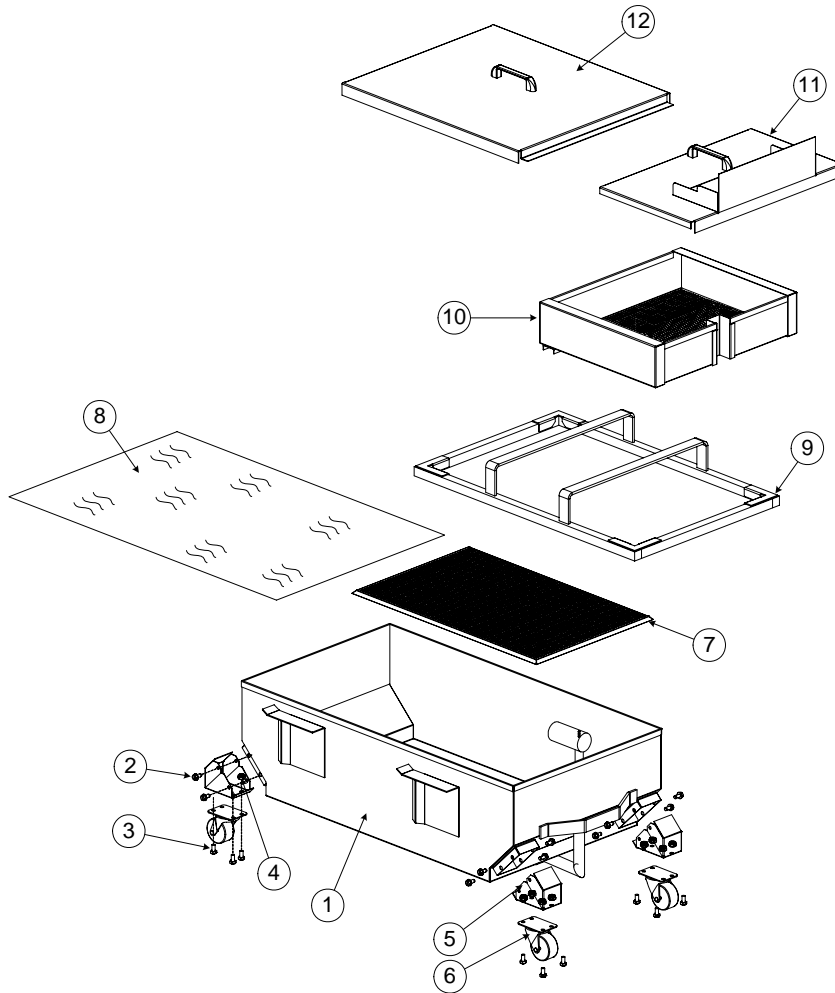
| ITEM | PART # | COMPONENT |
|------|------------|---|
| | 106-4006 | Microswitch Bracket Assembly, Oil Return |
| 1 | 901-2772 | Handle, RF Left |
| 2 | 900-2935 | Retainer, Nut |
| 3 | 816-0220 | Insulation, RF Switch |
| 4 | 810-0278 | Ball Valve, 1/2" Oil Return |
| 5 | 826-1366 | Nut, 4-40 Keps Hex w/External Teeth (pkg. of 25) |
| 6 | 807-2103 | Microswitch, Straight Lever (CE) |
| 7 | 200-6806 | Cover, Safety Switch |
| 8 | 106-3962 | Bracket Assembly, RF Switch |
| | 106-1225SP | Oil Suction Assembly |
| 9 | 813-0062 | Elbow, 90° BM |
| 10 | 813-0173 | Union, 1/2" NPT 150# BM |
| 11 | 813-0654 | Nipple, TBE 1/2" NPT x 4" Black |
| 12 | 813-0674 | Nipple, TBE 1/2" NPT x 7 1/4" Black |
| 13 | 200-1230 | Bracket, Front Male Manifold |
| | 106-1720 | Oil Suction Assembly (SCFD C/C) |
| * | 813-0062 | Elbow, 90° BM |
| * | 813-0173 | Union, 1/2" NPT 150# BM |
| * | 813-0093 | Nipple, TBE 1/2" NPT x 4" Black |
| * | 813-0741 | Nipple, TBE 1/2" NPT x 7 1/4" Black |
| * | 200-1230 | Bracket, Front Male Manifold |
| * | 813-0463 | Plug, Pipe 1/2" NPT Black |
| * | 813-0460 | Nipple, 1/2" NPT x 3" Black |
| * | 813-0022 | Nipple, 1/2" NPT Close Black |
| * | 813-0003 | Tee, 1/2" NPT Black |
| | 106-0774SP | Suction Manifold Assembly |
| 14 | 810-0697 | Disconnect, Male Suction Tube |
| * | 826-1392 | O-rings, for Male Disconnect (<i>pack of 5</i>) |
| 15 | 813-0608 | Coupling, 1/2" NPT BM Full |
| 16 | 823-3188 | Suction Manifold |
| | 106-1749 | Suction Manifold Assembly (SCFD C/C) |
| 14 | 810-0697 | Disconnect, Male Suction Tube |
| * | 816-0596 | O-rings, for Male Disconnect (<i>pack of 5</i>) |
| 15 | 813-0051 | Coupling, 1/2" NPT BM Full |
| 16 | 813-5101 | Suction Manifold |
| | 106-0858 | Oil Suction Start Fitting |
| 17 | 813-0022 | Nipple, 1/2" NPT x Close |
| 18 | 813-0463 | Plug, 1/2" Counter Sink |
| 19 | 813-0003 | Tee, 1/2" NPT BM |
| * | 210-8790 | Bracket, Oil Return/Flush Retainer |
| * | 200-8929 | Handle, Oil Return |
| * | 200-9850 | Handle, Oil Return (Application Series "DF" fryers) |
| * | 200-9295 | Handle, Oil Return (SCFD C/C) |
| * | 816-0548 | Cap, Oil Return Handle, Yellow |
| * | 816-0637 | Cap, Oil Return Handle, Blue |
| | | Pump and Motor |
| 20 | 810-2100 | Pump Motor, 120/230V |
| * | 807-3859 | Pump Motor, 115V, 60Hz |
| 21 | 810-2252 | Pump, Chili's, 5GPM |
| 22 | 810-2098 | Pump, 8GPM |
| * | 826-1264 | Pump, Viking 4 GPM, 2-piece (SCFD C/C) |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.8 UFF Filtration Components

2.8.1 UFF Filtration Components; D50 Series Fryers

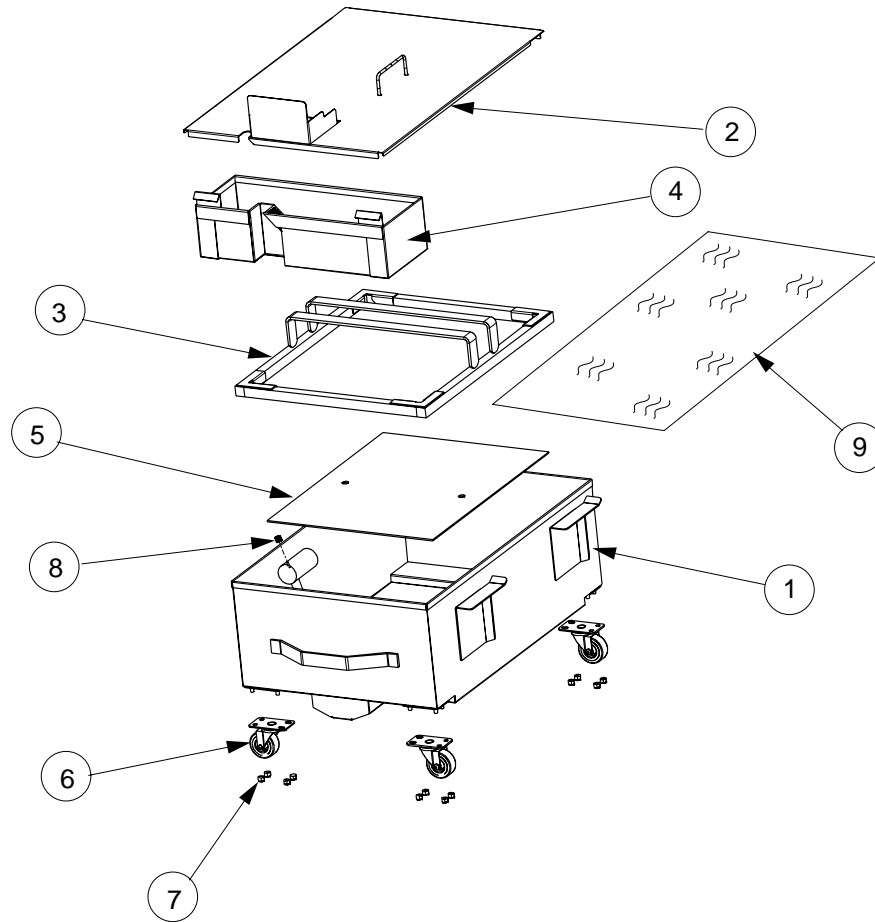


| ITEM | PART # | COMPONENT |
|------|------------|--|
| 1 | 106-2115SP | Filter Pan |
| 2 | 809-0805 | Screw, 1/4-20 x 1/2" |
| 3 | 809-0428 | Screw, 1/4-20 x 1/2" Steel |
| 4 | 809-0820 | Nut, Oval Locking, 1/4-20 |
| 5 | 823-4794 | Insert, Caster |
| 6 | 810-2805 | Caster, 2" |
| 7 | 823-3574 | Support Grid, Bottom Pan Screen |
| 8 | 803-0289 | Filter Paper, 22" x 34" (100 sheets per box) |
| 9 | 823-3573 | Hold-down Ring, Weighted |
| 10 | 823-4320 | Crumb Basket |
| 11 | 106-0752SP | Lid Assembly, Front |
| 12 | 106-1755SP | Lid Assembly, Rear |
| * | 106-3230SP | Lid Assembly, One Piece, Chili's |
| * | 106-2568SP | Wand Assembly |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.8.2 UFF Filtration Components; SCFD50 Series Fryers

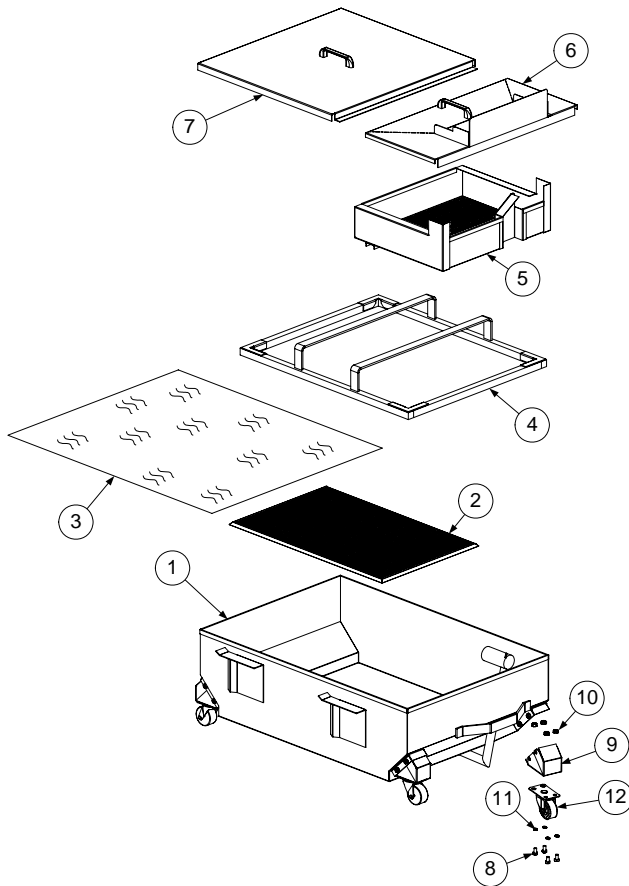


| ITEM | PART # | DESCRIPTION |
|------|------------|---|
| 1 | 106-5144SP | Filter Pan |
| 2 | 823-5639 | Lid, Filter Pan |
| 3 | 823-3573 | Ring, Hold Down |
| 4 | 823-5191 | Crumb Basket |
| 5 | 200-8003 | Screen, Sana Grid |
| 6 | 810-2805 | Caster, 2" |
| 7 | 809-0823 | Nut, Nylock, ¼-20 |
| 8 | 813-0568 | Pipe Plug, 1/8 NPT Socket-head |
| 9 | 803-0170 | Filter Paper, 16.5" x 25.75" (100 sheets per box) |

* Not illustrated.

DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST

2.8.3 UFF Filtration Components; D60 and D80 Series Fryers

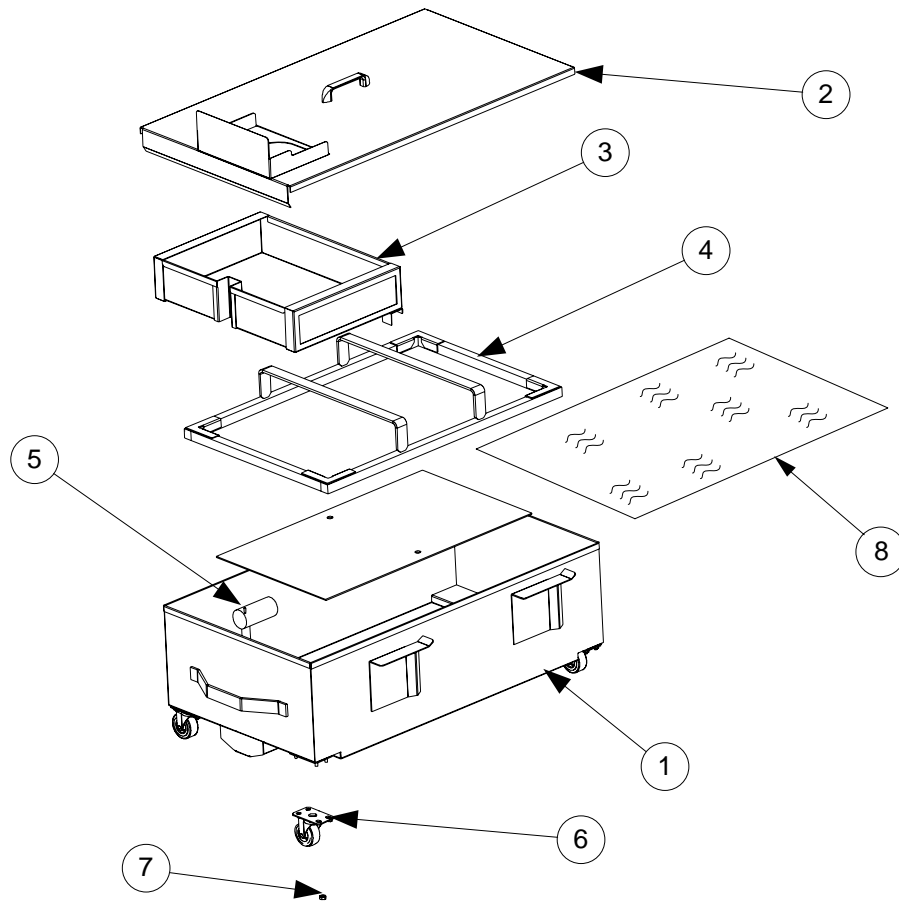


| ITEM | PART # | COMPONENT |
|------|------------|--|
| 1 | 106-0749SP | Filter Pan (UFF 60) |
| * | 106-1584SP | Filter Pan (UFF 80) |
| * | 106-4521 | Filter Pan (UFF 100) |
| 2 | 823-3365 | Support Grid, Bottom Pan Screen |
| 3 | 803-0289 | Filter Paper, 22 x 34" (100 sheets per box)(UFF 60) |
| * | 803-0303 | Filter Paper, 26 x 34" (100 sheets per box) (UFF 80) |
| 4 | 823-3361 | Hold-down Ring, Weighted (UFF 60) |
| * | 823-3439 | Hold-down Ring, Weighted (UFF 80) |
| 5 | 823-4320 | Crumb Basket (UFF 60) |
| * | 823-3443 | Crumb Basket (UFF 80) |
| 6 | 106-0752SP | Lid, Front (UFF 60) |
| * | 106-1587SP | Lid, Front (UFF 80) |
| 7 | 106-0753SP | Lid, Rear (UFF 60) |
| * | 106-1588SP | Lid, Rear (UFF 80) |
| 8 | 809-0428 | Screw, ¼-20 x ½" Steel |
| 9 | 823-4794 | Insert, Caster |
| 10 | 809-0820 | Nut, Oval Locking, ¼-20 |
| 11 | 809-0805 | Screw, ¼-20 x ½" |
| 12 | 210-2805 | Caster, 2" |

* Not illustrated.

DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST

2.8.4 UFF Filtration Components; SCFD60 and FPD65 Series Fryers

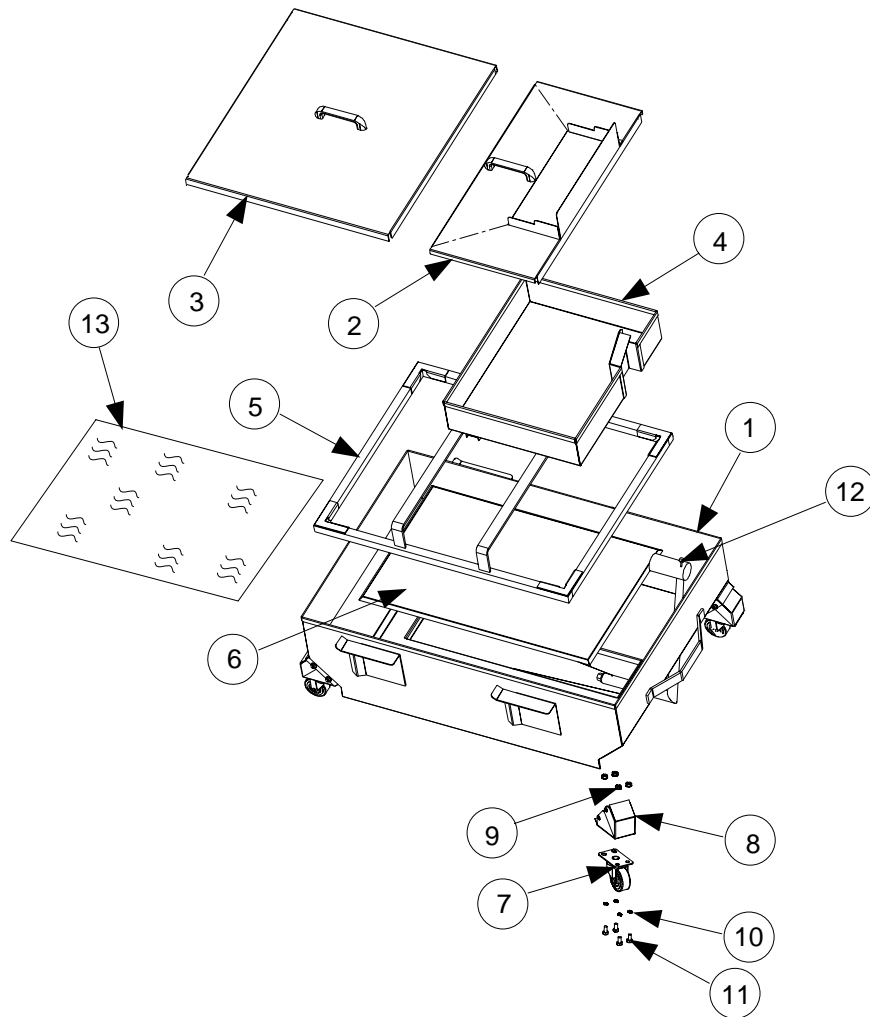


| ITEM | PART # | COMPONENT |
|------|------------|---|
| 1 | 106-1220SP | Filter Pan (SCFD) |
| * | 823-4109 | Filter Pan (FPD) |
| 2 | 106-4725SP | Lid Assembly (SCFD) |
| * | 106-6119SP | Lid Assembly (FPD) |
| 3 | 823-4320 | Crumb Basket (SCFD) |
| * | 823-3872 | Crumb Basket (FPD) |
| 4 | 823-3361 | Hold Down Ring (SCFD) |
| * | 810-2350 | Filter Leaf (FPD) |
| 5 | 200-5726 | Screen, Bottom Filter (SCFD) |
| * | 810-2582 | Fitting, Filter Leaf (FPD) |
| 6 | 810-2805 | Caster, 2" |
| 7 | 809-0070 | Nut, 1/4-20 Hex S/S |
| 8 | 803-0289 | Filter Paper, 22" x 34" (100 sheets; 803-0266, 25 sheets) |

* Not illustrated.

DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST

2.8.5 UFF Filtration Components; SCFD80 Series Fryers



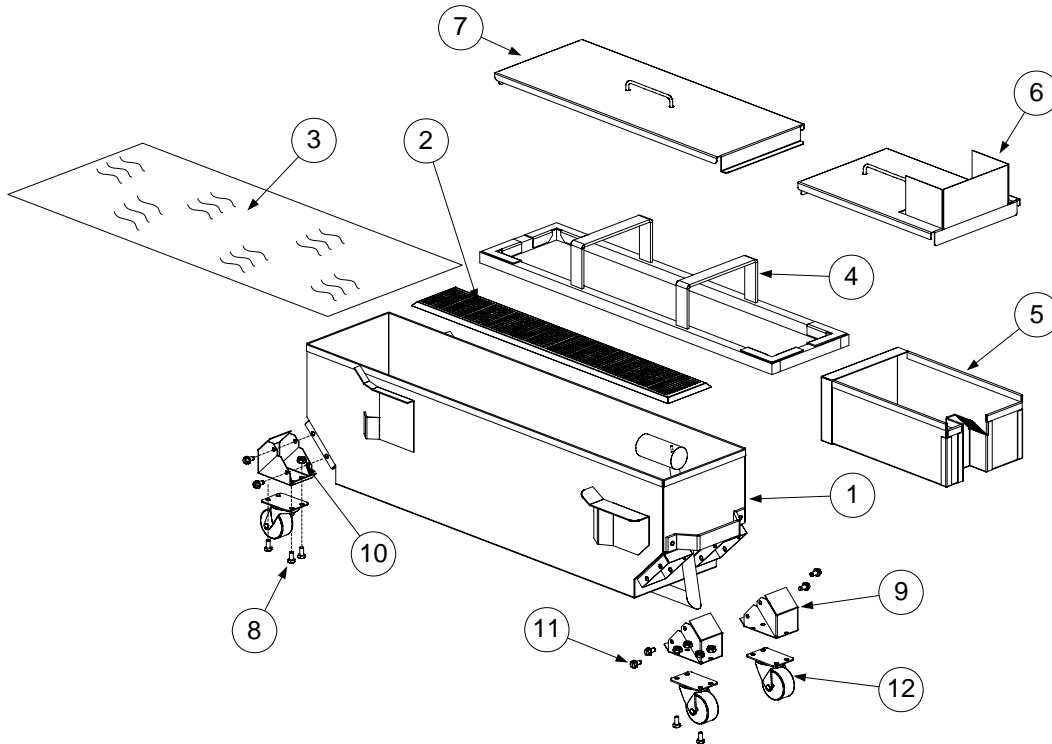
| ITEM | PART # | COMPONENT |
|------|----------|--|
| 1 | 823-5406 | Filter Pan |
| 2 | 106-5321 | Lid, Front (UFF 80) |
| 3 | 106-5317 | Lid, Rear (UFF 80) |
| 4 | 823-5412 | Crumb Basket |
| 5 | 823-5409 | Hold Down Ring |
| 6 | 823-3365 | Grid |
| 7 | 810-2805 | Caster, 2" |
| 8 | 823-5407 | Insert, Caster |
| 9 | 809-0804 | Nut, 1/4-20 Cap (with Ext. Tooth) |
| 10 | 809-0191 | Washer, 1/4" Spring Lock |
| 11 | 809-0428 | Screw, 1/4-20 x 1/2 Hex Head |
| 12 | 813-0679 | Plug, 1/8" S/S Square Head Pipe (Suction) |
| * | 813-0704 | Plug, 3/8" S/S Hex Head |
| 13 | 803-0303 | Filter Paper, 26" x 34" (100 sheets per box) |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.9 SUFF Filtration Components

2.9.1 SUFF Filtration Components; D50 Series Fryers

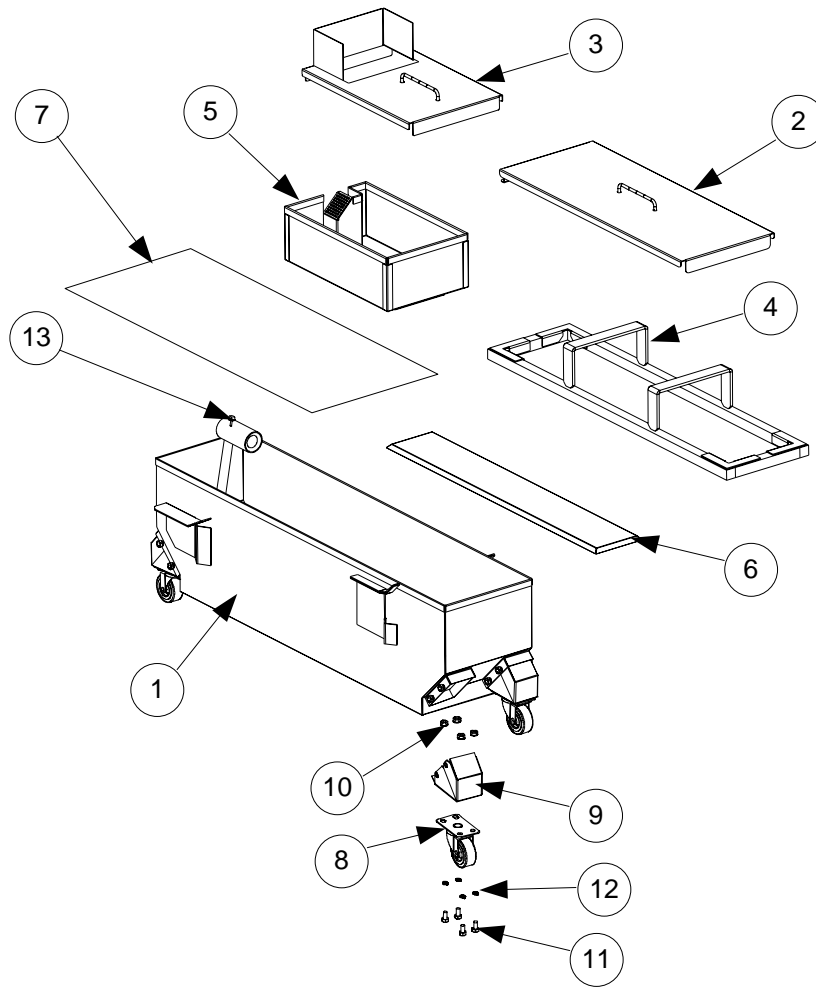


| ITEM | PART # | COMPONENT |
|------|----------|---|
| 1 | 823-3796 | Filter Pan (SUFF 50) |
| * | 813-0684 | Plug, Hex Socket, 3/8" NPT |
| * | 813-0679 | Plug, 1/8" SS Square Head (Female Disconnect) |
| 2 | 823-3790 | Support Grid, Bottom Pan Screen |
| 3 | 803-0317 | Filter Paper, 8-1/4 x 25-3/4" |
| 4 | 823-3795 | Hold-down Ring, Weighted |
| 5 | 823-3736 | Crumb Basket |
| 6 | 823-3797 | Filter Pan Cover, Front |
| 7 | 823-3798 | Filter Pan Cover, Back |
| 8 | 809-0428 | Screw, 1/4-20 x 1/2" Steel |
| 9 | 823-4794 | Insert, Castor |
| 10 | 809-0820 | Nut, Oval Locking, 1/4-20 |
| 11 | 809-0805 | Screw, 1/4-20 x 1/2" |
| 12 | 810-2805 | Castor, 2" |

* Not Illustrated.

DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST

2.9.2 SUFF Filtration Components; CFD50 Series Fryers

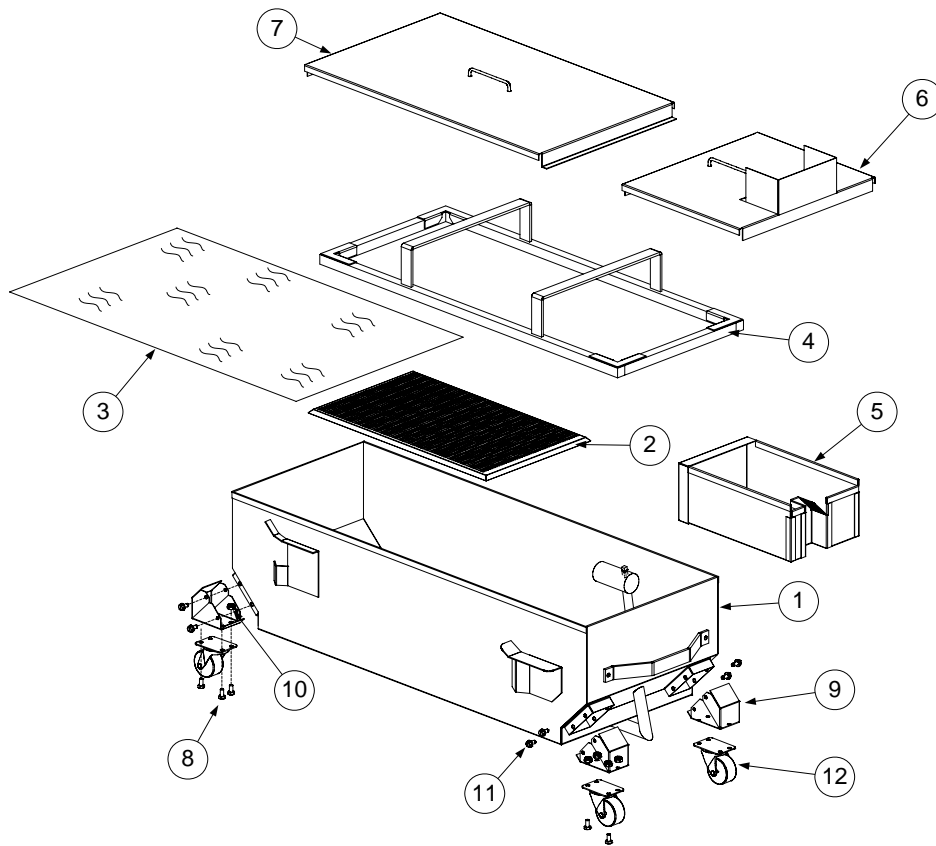


| ITEM | PART # | COMPONENT |
|------|----------|-----------------------------------|
| 1 | 823-3796 | Filter Pan |
| 2 | 823-3798 | Lid, Filter Pan, Rear |
| 3 | 823-3797 | Lid, Filter Pan, Front |
| 4 | 823-3795 | Hold-down Ring |
| 5 | 823-5423 | Crumb Basket (SUFF50/60/80) |
| 6 | 823-3790 | Grid, Bottom Filter |
| 7 | 803-0317 | Filter Paper, 8.25" x 25.75" |
| 8 | 810-2805 | Caster, 2" |
| 9 | 823-5407 | Insert, Caster |
| 10 | 809-0804 | Nut, 1/4-20 Cap (with Ext. Tooth) |
| 11 | 809-0428 | Screw, 1/4-20 x 1/2" Hex Head |
| 12 | 809-0191 | Washer, 1/4" Spring Lock |
| 13 | 813-0679 | Plug, 1/8" SS Square Head |

* Not Illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.9.3 SUFF Filtration Components; D60 and D80 Series Fryers

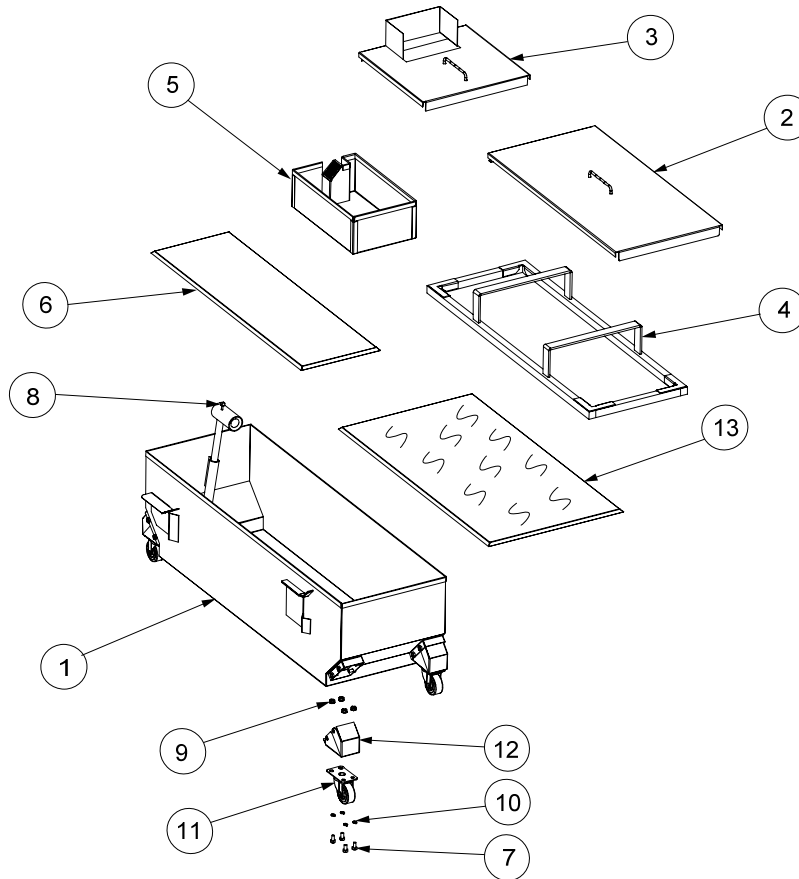


| ITEM | PART # | COMPONENT |
|------|----------|---|
| 1 | 823-3774 | Filter Pan (SUFF 60) |
| * | 823-3821 | Filter Pan, (SUFF 80) |
| * | 813-0684 | Plug, Hex Socket, 3/8" NPT |
| * | 813-0679 | Plug, 1/8" SS Square Head (Female Disconnect) |
| 2 | 823-3768 | Support Grid, Bottom Pan Screen (SUFF 60/80) |
| 3 | 803-0289 | Filter Paper, 22" x 34" (SUFF 60/80) |
| 4 | 823-3770 | Hold-down Ring, Weighted (SUFF 60) |
| * | 823-3849 | Hold-down Ring, Weighted (SUFF 80) |
| 5 | 823-3736 | Crumb Basket (SUFF 60/80) |
| 6 | 823-3766 | Filter Pan Cover, Front (SUFF 60) |
| * | 823-3739 | Filter Pan Cover, Front (SUFF 80) |
| 7 | 823-3767 | Filter Pan Cover, Back (SUFF 60) |
| * | 823-3741 | Filter Pan Cover, Back (SUFF 80) |
| 8 | 809-0428 | Screw, 1/4-20 x 1/2" Steel |
| 9 | 823-4794 | Insert, Caster |
| 10 | 809-0820 | Nut, Oval Locking, 1/4-20 |
| 11 | 809-0805 | Screw, 1/4-20 x 1/2" |
| 12 | 810-2805 | Caster, 2" |

* Not Illustrated

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.9.4 SUFF Filtration Components; CFD60 and CFD80 Series Fryers

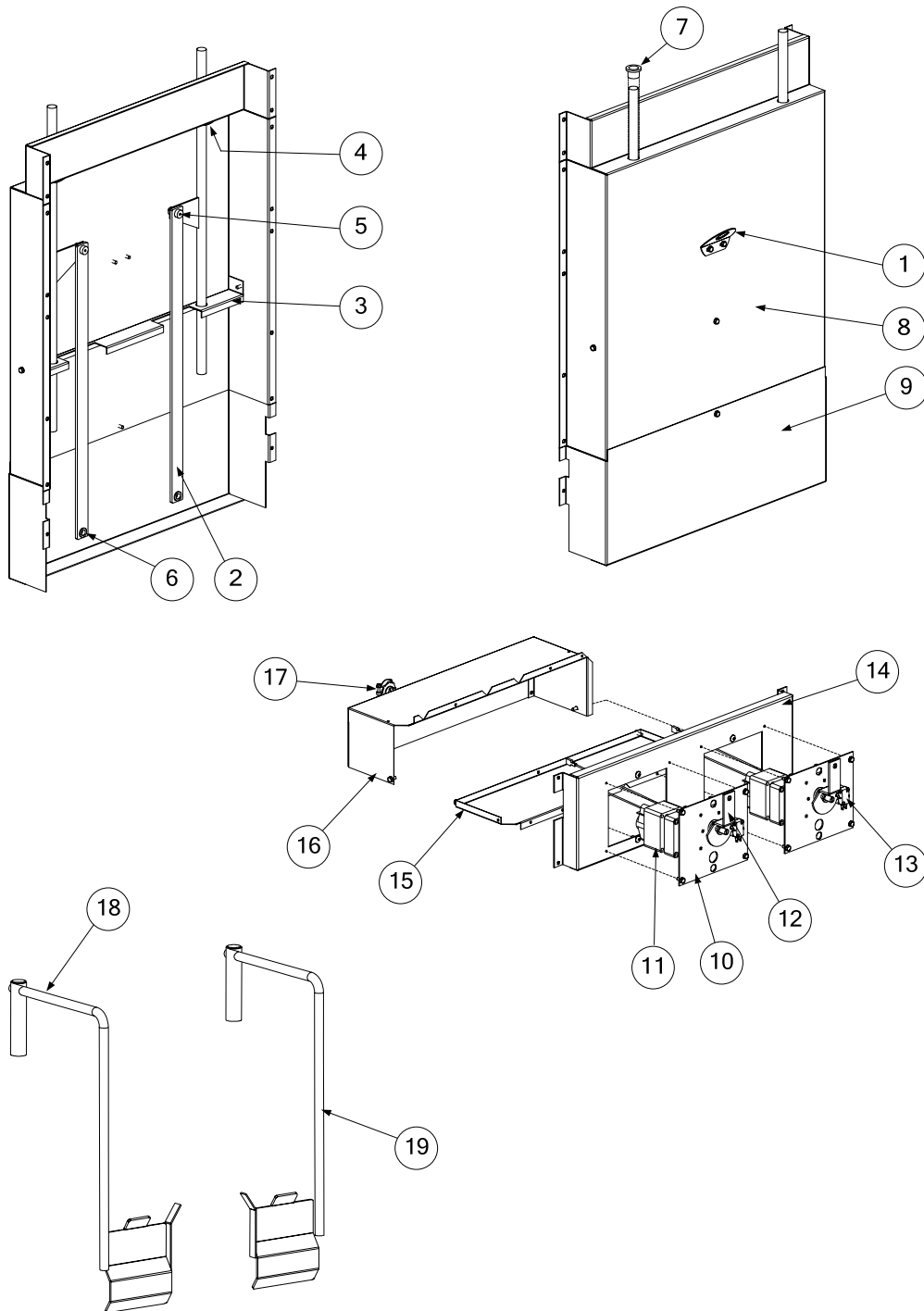


| ITEM | PART # | COMPONENT |
|------|----------|--|
| 1 | 823-5420 | Filter Pan (SUFF 60) |
| * | 823-3821 | Filter Pan (SUFF 80) |
| * | 106-1433 | Filter Pan, Early Style, External Pickup (SUFF 80) |
| 2 | 823-5424 | Filter Pan Cover, Front (SUFF 60) |
| * | 823-3739 | Filter Pan Cover, Front (SUFF 80) |
| 3 | 823-5425 | Filter Pan Cover, Back (SUFF 60) |
| * | 823-3741 | Filter Pan Cover, Back (SUFF 80) |
| 4 | 823-5422 | Hold-down Ring, Weighted (SUFF 60) |
| * | 823-3849 | Hold-down Ring, Weighted (SUFF 80) |
| 5 | 823-5423 | Crumb Basket (SUFF 60/80) |
| 6 | 823-5421 | Support Grid, Bottom Pan Screen (SUFF 60/80) |
| 7 | 809-0428 | Screw, 1/4-20 x 1/2" Steel |
| 8 | 813-0679 | Plug, 1/8" SS Square Head (Female Disconnect) |
| 9 | 809-0804 | Nut, 1/4-20 Locking (with ext. tooth) |
| 10 | 809-0191 | Washer, 1/4 Spring Lock |
| 11 | 810-2805 | Caster, 2" |
| 12 | 823-5407 | Insert, Caster |
| 13 | 803-0289 | Paper, Filter- 22 x 34" (SUFF 60/80) |
| * | 813-0684 | Plug, Hex Socket, 3/8" NPT |

* Not Illustrated.

DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST

...2.10 Basket Lift Components; D50, D60, and D80 Models



**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

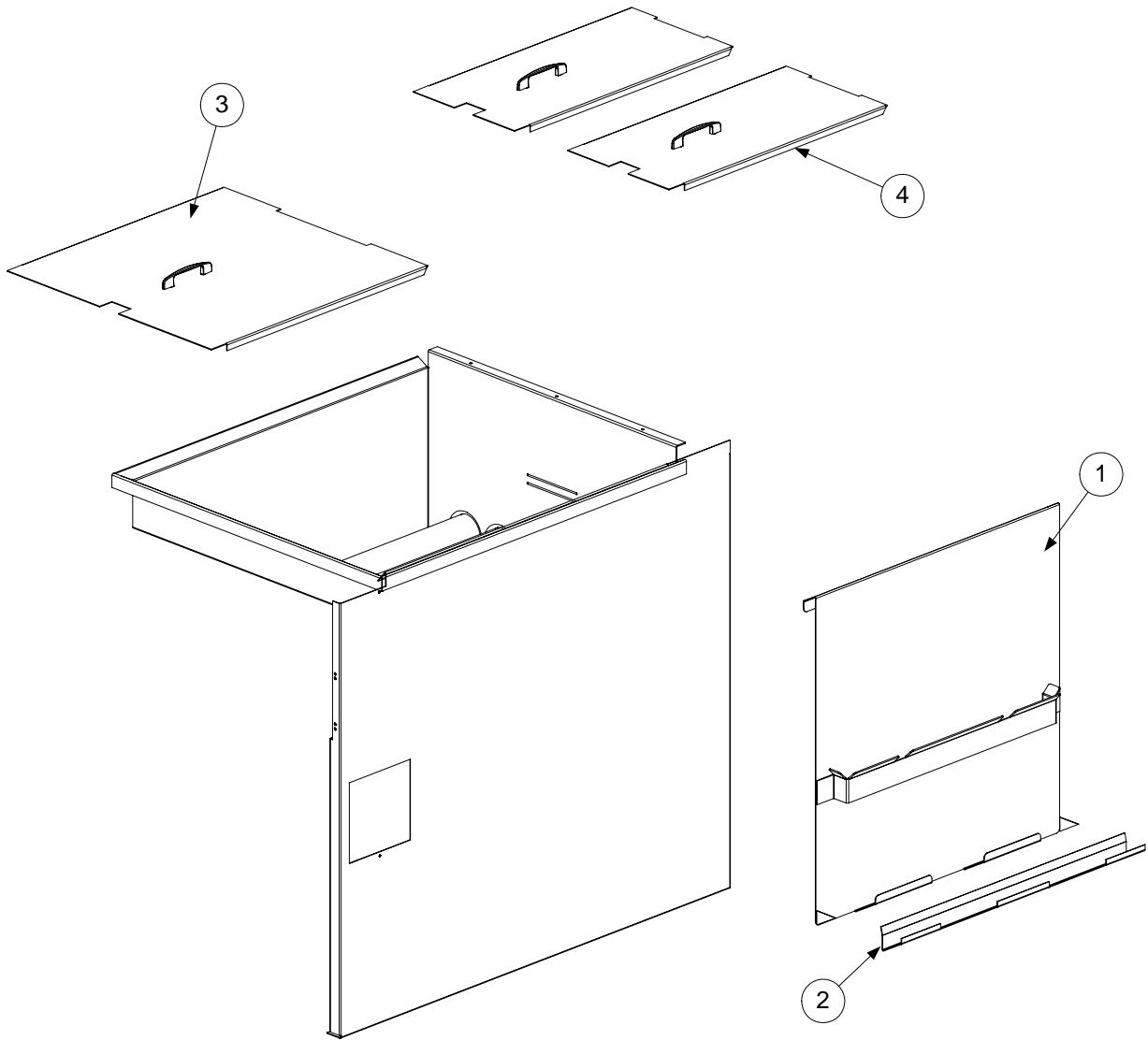
2.10 Basket Lift Components; D50, D60, and D80 Series Fryers (cont.)

| ITEM | PART # | COMPONENT |
|------|----------|---|
| | 106-1914 | Basket Lift Assembly (D50) |
| | 106-1870 | Basket Lift Assembly (D60) |
| | 106-1926 | Basket Lift Assembly (D80) |
| 1 | 200-1376 | Bracket, Restraining |
| 2 | 200-2069 | Member, Lift Control Arm |
| | | Channel, Support Autolift |
| 3 | 200-3094 | Channel (D80) |
| * | 200-2735 | Channel (D60) |
| * | 200-3072 | Channel (D50) |
| 4 | 809-0882 | Truarc Ring, $\frac{3}{4}$ " |
| 5 | 809-0907 | Screw, $\frac{3}{8}$ " x $\frac{1}{4}$ " Shoulder |
| * | 809-0863 | Nut, $\frac{5}{16}$ "-18 Hex |
| 6 | 810-2140 | Bushing (Bronze), Oiltite $\frac{3}{8}$ " x $\frac{1}{4}$ " |
| 7 | 813-0035 | Bushing (Bronze), Oiltite .640 I.D. |
| | | Back, Basket Lift Motor |
| 8 | 824-0996 | Back (D80) |
| * | 824-0958 | Back (D60) |
| * | 824-0990 | Back (D50) |
| | | Cover, Basket Lift Motor |
| 9 | 824-0997 | Cover (D80) |
| * | 824-0959 | Cover (D60) |
| * | 824-0991 | Cover (D50) |
| 10 | 200-1693 | Plate, Motor Mounting |
| 11 | 807-0107 | Motor, Gear |
| 12 | 823-3626 | Switch, Limit Cam |
| 13 | 807-2104 | Microswitch |
| * | 810-2144 | Spacer |
| * | 809-0846 | Screw, 4-40 x 1" |
| * | 809-0842 | Nut, 4-40 Nylock |
| | | Motor Housing |
| 14 | 200-3150 | Housing, Front (D80) |
| * | 200-2736 | Housing, Front (D60) |
| * | 200-3087 | Housing, Front (D50) |
| 15 | 200-3114 | Housing, Bottom (D80) |
| * | 200-2739 | Housing, Bottom (D60) |
| * | 200-3079 | Housing, Bottom (D50) |
| 16 | 200-3116 | Housing, Back (D80) |
| * | 200-2740 | Housing, Back (D60) |
| * | 200-3091 | Housing, Back (D50) |
| 17 | 807-0140 | Connector, $\frac{3}{8}$ " |
| * | 807-3087 | Basket Lift Timer, 120V, 60 Hz, 15 min. |
| * | 810-1822 | Timer Knob |
| * | 810-1823 | Timer Button |
| * | 826-1552 | Basket Lift Timer Kit |
| 18 | 823-3505 | Left Basket Lift Arm |
| 19 | 823-3499 | Right Basket Lift Arm |

* Not illustrated.

**DECATHLON SERIES GAS FRYERS
CHAPTER 2: PARTS LIST**

2.11 Trough, Holster, and Cover Components; D60, FPD65, & D80 Models



| ITEM | PART # | COMPONENT |
|------|------------|---------------------------------------|
| 1 | 106-2668 | Holster Assembly, Vat Cover |
| 2 | 823-3384 | Trough, Holster Assembly |
| 3 | 106-1447 | Cover, Full-vat |
| 4 | 106-2585SP | Cover, Split-vat |
| * | 106-2897SP | Cover, FPD |
| * | 810-2030 | Handle, Vat Cover (Full- and Split-) |
| * | 809-0107 | Screw, 8-32 x 3/8" Round Slotted Head |
| * | 823-4767 | Splash Guard |
| * | 803-0278 | L-shaped Brush |
| * | 803-0197 | Fryer's Friend |
| * | 823-3938 | Crumb Scoop |

* Not illustrated.



Dean, 8700 Line Avenue, Shreveport, Louisiana 71106

TEL 1-318-865-1711

FAX (Tech Support) 1-318-219-7135

PRINTED IN THE UNITED STATES

SERVICE HOTLINE
1-800-551-8633

819-5922
07/2017