

# Operations & Service Manual

GEF Series  
GEF-VH Series



Models: GEF-400  
GEF-560  
GEF-720



Models: GEF-400-VH  
GEF-560-VH



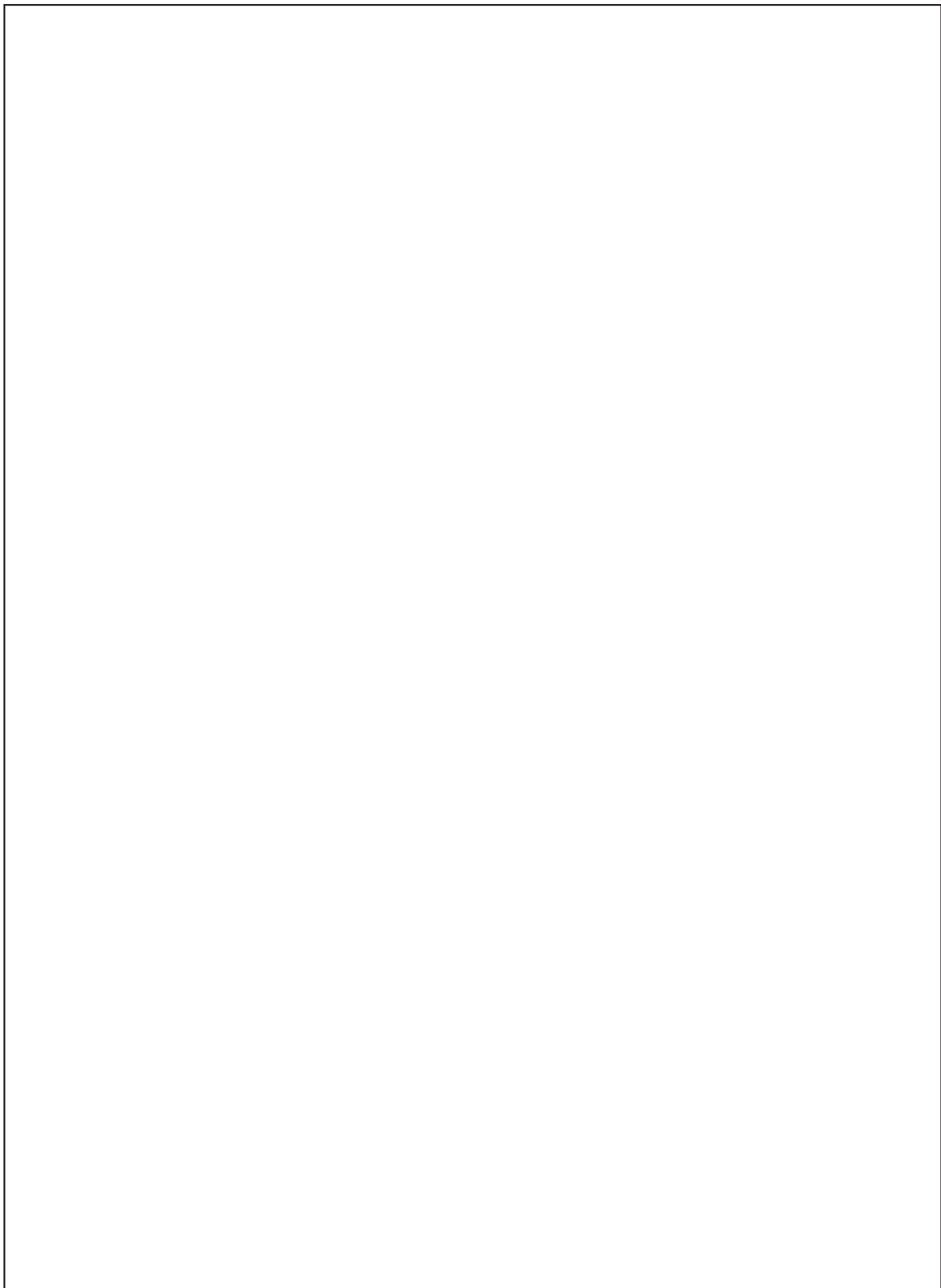
Responsive. Reliable.

ISO 9001 Registered • Committed to Quality

2750 Gunter Park Drive West • Montgomery, AL 36109 USA

Toll Free: **800.554.4537** (USA & Canada Only) Other: **334.272.1457**

Fax: 334.239.4117 • Website: [www.gfse.com](http://www.gfse.com) • Email: [services@gfse.com](mailto:services@gfse.com)





Responsive. Reliable.

## LIMITED WARRANTY

- Subject to the terms and conditions of this Limited Warranty as herein stated, all Giles Enterprises Inc. (hereafter referred to as "Giles") food service equipment and parts purchased new from an authorized Giles representative are warranted as to defects in material or workmanship for a period of twenty-four (24) months from the date of installation, provided, however, that with regard to labor costs in connection with this warranty, see below. All installations must be made by a qualified installing agency in accordance with all applicable codes and/or regulations in the jurisdiction in which installed. Limited warranty coverage is extended only to the original owner and is void if the unit is resold.
- During the Limited Warranty period, Giles will replace or recondition, at its factory, any part or parts of this unit which Giles inspectors judge defective, provided the unit has been properly installed, subjected to normal usage, and operated and maintained in accordance with specified procedures. This Limited Warranty does not cover cosmetic damage, and damage due to acts of God, accident, misuse, alteration, negligence, abuse, or use of unorthodox repair methods. All parts replaced under this Limited Warranty carry only the unexpired term of this Limited Warranty. Limited Warranty service may be furnished only by an authorized Giles service representative.
- If Limited Warranty service is requested, Giles will dispatch factory-authorized service representatives to inspect, repair, recondition, or replace units of its manufacture with such labor being rendered without cost to owner for twenty-four (24) months from the date of installation. Otherwise, service, including labor and transportation charges or other expenses, in connection with the removal or installation of any part or parts supplied under this Limited Warranty, are specified on the original sales contract between the purchaser and the authorized Giles representative.
- **Failure to use Giles OEM replacement parts and Giles OEM filters may void this Warranty.**
- Giles reserves the right to change or improve its equipment and/or parts in any way without obligation to alter such equipment or parts previously manufactured.
- Giles makes no further warranties, express or implied, including implied warranties of merchantability or fitness for a particular purpose, and has no other obligation or liability not specifically stated herein.
- Repair or replacement as provided under this limited warranty is the exclusive remedy. Giles shall not be liable for any incidental or consequential damages for breach of any express or implied warranty on this product, except to the extent prohibited by applicable law. Any implied warranty of merchantability or fitness for a particular purpose on this product is limited in duration to the duration of this limited warranty.
- Used Giles foodservice equipment or parts, or Giles foodservice equipment or parts not purchased from an authorized Giles representative, carry no warranties, express or implied.

## Safety vii

Safety Overview .....	vii
Specific Safety Precautions .....	viii

## 1. Introduction ..... 1

1.1 Construction .....	1
1.2 Standard Features .....	1
1.3 Optional Features .....	1
1.4 Specifications .....	2
1.4.1 Overall Dimensions for GEF-400, GEF-560, GEF-720 .....	2
1.4.2 Overall Dimensions for GEF-400-VH, GEF-560-VH, GEF-720/VH .....	3
1.4.3 Regulatory Listings .....	4
1.4.4 Basket Sizes .....	4
1.4.5 Cooking Capacity .....	4

## 2. Installation ..... 5

2.1 Appliance Location .....	5
2.2 Unpacking .....	6
2.3 Electrical Requirements .....	7
2.4 Electrical Connections .....	9
2.4.1 Conduit Routing .....	9
2.4.2 Service Box Connections .....	10
2.5 Ventilation of Non-Ventless Fryer .....	10
2.6 Ventless Hood Clearances (VH Model) .....	10
2.7 Ventless Hood Fire Suppress System .....	11
2.8 Fusible Link and Gas Cartridge Locations .....	11
2.9 Fire Extinguisher Nozzle and Tank Locations .....	12
2.10 Fire Alarm Connection .....	13
2.11 Changing the Door Swing .....	14

## 3. Overview ..... 15

3.1 Control Panel .....	16
3.2 Lower Cabinet Area .....	18
3.3 Filter Pan Assembly .....	20
3.4 Basket and Elevator Assembly .....	22
3.5 Ventless Hood (VH Model Only) .....	24
3.6 Accessories (Included) .....	26
3.7 Accessories (Not Included, Purchased Separately) .....	28

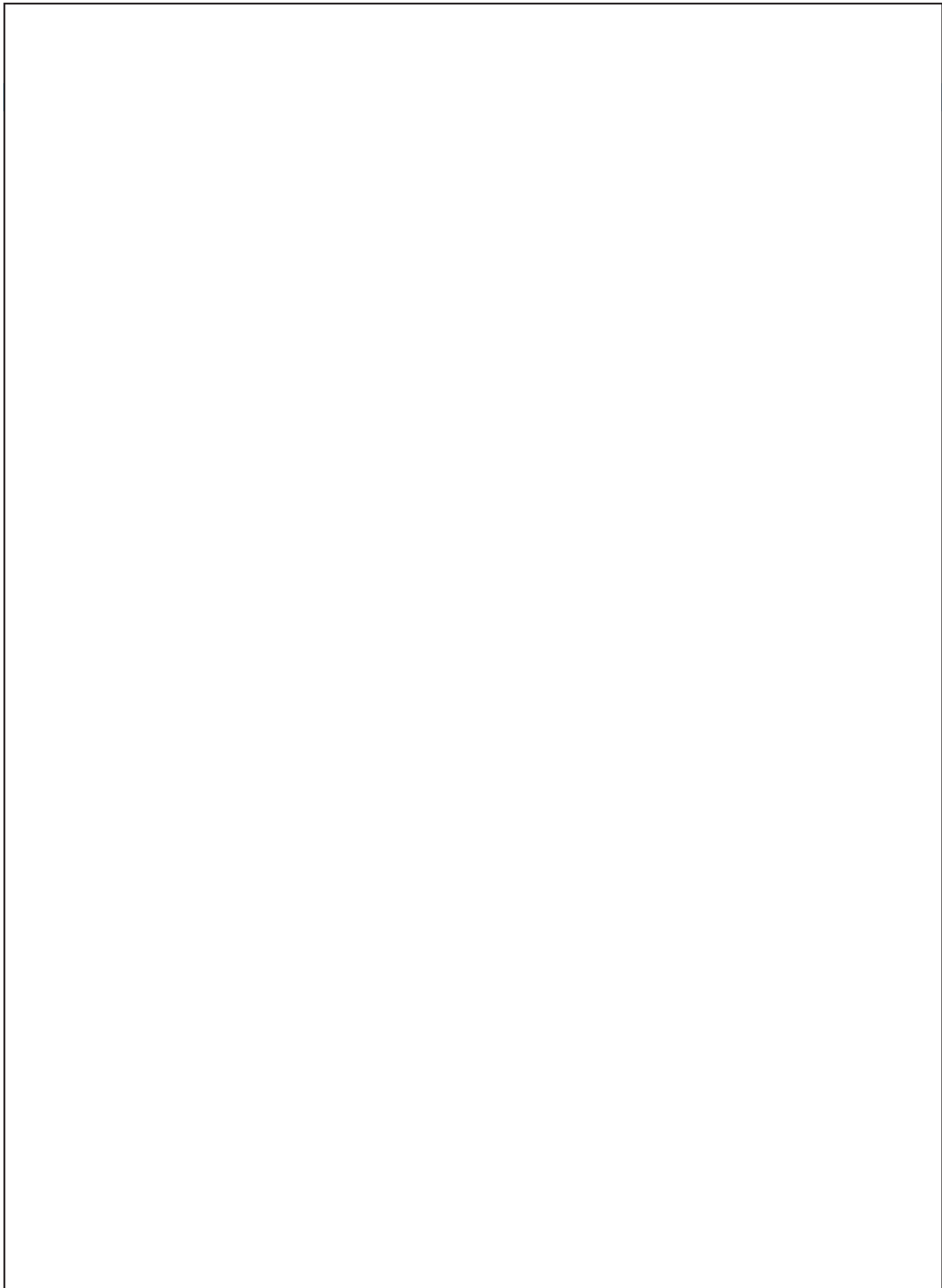
## 4. Preparation for Operating Fryer ..... 31

4.1 Initial Fryer Set-up .....	31
4.2 Power Test .....	32
4.3 Heating Element Test .....	32
4.4 Filter Pump Test .....	33
4.5 Perform Boil Out Procedure .....	33
4.6 Finalize Preparation - Clean Filter Pan & Accessories .....	34



<b>5.</b>	<b>Fryer Operation</b>	<b>35</b>
5.1	Computer Cooking Controller	36
5.1.1	Keys and Functions	36
5.1.2	General Operation - Fryer Controller	38
5.1.3	Manually Setting a Cook Time & Cooking Temperature	39
5.1.4	Working with Menu Item Presets	40
5.1.4.1	Editing a Menu Preset	41
5.1.4.2	Selecting a Menu Preset for Cooking	44
5.1.5	Cooking Cycle - General Overview	45
5.1.6	Other Controller Features	45
5.1.6.1	Manually Operating the Basket Lift	45
5.1.6.2	COOL Mode	46
5.1.6.3	AUTO-COOL Feature	46
5.1.6.4	BOIL OUT Mode	46
5.1.7	User Settings - Access & Edit	47
5.1.8	PASSWORD Protection	48
5.1.9	Start-up Procedure	48
5.1.9.1	Start-up Non-Ventless, GEF	48
5.1.9.2	Start-up Ventless, GEF-VH	49
5.1.10	Controller Errors & Alarms	50
5.1.10.1	Resolving Controller Errors & Alarms	51
5.2	Cooking Procedures	53
5.3	Filtering Cooking Oil	57
5.4	Removing Used Waste Cooking Oil from Fryer	60
5.5	Normal Shutdown	63
5.6	Emergency Shutdown	63
<b>6.</b>	<b>Cleaning</b>	<b>64</b>
6.1	Boil-Out Procedure (Cleaning the Fry Pot)	64
6.2	Cleaning the Filter Pan & Replacing Filter Media	67
<b>7.</b>	<b>Ventless Hood</b>	<b>69</b>
7.1	Filters	69
7.1.1	Ventless Hood Filter Table	69
7.1.2	Baffle Filter Removal	70
7.1.3	Baffle Filter Installation	71
7.1.4	Baffle Filter Cleaning	72
7.1.5	EAC Filter Cell Removal	72
7.1.6	EAC Filter Installation	73
7.1.7	EAC Filter Operation Overview - Status & Alarms	73
7.1.7.1	EAC Filter Cell Cleaning Timer	75
7.1.8	EAC Filter Cleaning	76
7.1.9	Charcoal Filter Removal & Installation	78
7.1.10	Charcoal Filter Maintenance	78
7.1.11	Filter Alarm Chart	79
7.2	Maintenance	81
7.2.1	Monthly Interlock Testing	81

7.2.2	Quarterly Hood Cleaning . . . . .	82
7.2.3	Semi-Annual Fire Suppression System Inspection & Service . . . . .	82
7.2.4	Annual Fire Suppression System Inspection & Service . . . . .	82
7.2.5	12-Year Fire Suppression System Inspection & Service . . . . .	82
7.2.6	Maintenance & Service Log . . . . .	83
<b>8.</b>	<b>Troubleshooting . . . . .</b>	<b>84</b>
8.1	Temperature Control System . . . . .	84
8.2	Oil Filtration System . . . . .	87
8.3	Basket Elevator System . . . . .	87
<b>9.</b>	<b>Parts List . . . . .</b>	<b>89</b>
9.1	Parts Ordering and Service Information . . . . .	89
9.2	Control Panel & Front Header . . . . .	90
9.3	Front Lower Cabinet . . . . .	92
9.4	Fry Pot . . . . .	94
9.5	Rear Lower Cabinet . . . . .	96
9.6	Basket Cover and Basket . . . . .	98
9.7	Filter Pan . . . . .	100
9.8	Front Ventless Hood (GEF-VH Only) . . . . .	102
9.9	Rear Ventless Hood (GEF-VH Only) . . . . .	104




## Safety

### Safety Overview:

The instructions contained in this manual have been prepared to aid in learning the proper procedures for installing, operating and servicing *Giles Model GEF or GEF-VH Series Electric Fryer*.

Throughout the manual, safety precautions are identified by a hazard alert symbol and key words such as **DANGER**, **WARNING** or **CAUTION**. Alert information precedes the tasks to which it applies. Suggested, recommended, or other noteworthy information is identified as **NOTES**, or will be noted as **IMPORTANT!**. Additionally, certain words are used to indicate a specific meaning, or to add emphasis as follows:

- Shall:** understood to be mandatory.
- Should:** understood to be advisory.
- May:** understood to be permissive.
- Will:** indicates a future event or condition to occur.

 **Hazard Alert Symbols** are used in conjunction with key words, such as **DANGER**, **WARNING**, or **CAUTION**, to alert users of potential personal injury hazards and/or poor operating practices. These will immediately precede precautionary measures pertaining to avoiding such hazards or practices. Adhere to all information following these symbols to avoid possible injury, or even death. Failure to do so may also void the factory warranty.

 *This product can expose Users to chemicals including lead, nickel, cobalt, aluminum, cadmium, brass, carbon, copper or BPA which are known in the state of California to cause cancer, birth defects and other reproductive harm. For more information go to: [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov).*

### **DANGER**

Indicates an imminently hazardous situation which, if not avoided, will result in serious personal injury, even death.

### **WARNING**

Indicates a potentially hazardous situation which, if not avoided, could result in serious injury, even death.

### **CAUTION**

Indicates a potentially hazardous situation which, if not avoided, may result in minor to moderate injury. This notification is also used as an alert to unsafe practices.

### **CAUTION**

If used without the safety alert symbol, indicates a potentially hazardous situation which, if not avoided, may result in equipment and/or property damage, and may void the factory warranty.

### **NOTE or IMPORTANT!**

Identifies suggested, recommended, or other important information.


## Specific Safety Precautions:

For your safety, please observe the following precautions when operating or servicing the **GEF or GEF-VH Electric Fryer**. Adhering to the following important safety precautions will help Users to avoid personal injury and/or damage to the equipment.

### DANGER

- Before cleaning or performing maintenance, place power switch in the **OFF** position. Turn **OFF** power at the electrical panel supplying power to remove all power from the appliance.
- **DO NOT** wash down the Fryer interior or exterior with water spray.
- Failure to comply with **DANGER** notices will result in serious injury, even death; or damage to equipment and/or property and may void the factory warranty.

### WARNING

- A fryer with an integral, ventless/recirculating hood is *not* suitable for every commercial food service application. Failure to fully comply with all site requirements and installation limitations as outlined in the *GFSE Hood Approval Letter and this Manual*, may result in poor or highly unsatisfactory hood unit performance..
- The unit must be adequately and properly grounded. Improper grounding may result in electrical shock to User. Always refer to local electrical code to ensure proper grounding of this or any other electrical equipment.
- Check the rating label on the unit to determine the proper power supply required. Consult with a qualified electrician or service technician to ensure that installation will comply with the unit's electrical requirements and all local codes, and that circuit breakers and wiring are of sufficient rating and gauge to power the equipment. A wiring diagram has been provided. Appliance must be installed and electrically grounded in accordance with local code, or in the absence of local code, in accordance with the National Electrical Code, NFPA 70.
- Improper installation, adjustment, alteration, service, or maintenance could result in serious injury, even death; equipment and/or property damage; and will potentially void the factory warranty.
- **DO NOT** use or store flammable liquids, or materials that produce flammable vapors, in the vicinity of this or any other appliance!
- **DO NOT (or ALLOW OTHERS) for any reason, stand or step onto the top of the appliance.** Cooking oil in Fryers can be **EXTREMELY HOT (excess of 330°F [166°C])**. Bodily contact will cause extremely serious injury. Lids used to sometimes cover cooking vats/pots are not designed to, and **WILL NOT**, support the weight of a person. 
- Failure to comply with **WARNING** notices could result in serious injury, even death; damage to equipment and/or property; and will potentially void the factory warranty.

### CAUTION

- The appliance must remain in an upright position.
- Exercise care when removing the unit from shipping pallet.
- **DO NOT** operate the appliance, unless its components and their intended functions are fully understood (see **Section 3**). After reading and fully understanding **Section 3**, closely follow the presented procedures and instructions in order to avoid equipment damage or malfunction.
- **To avoid personal injury, it is recommended that thermal hand protection (gloves or mitts) be worn while tended the appliance.** Certain parts of the fryer will become very **HOT** during operation; temperatures inside cabinet may exceed **150°F (65.5°C)**! Exercise caution when operating and cleaning.
- Placing foods containing excessive moisture into hot oil, or attempting to load larger than recommended batch sizes can cause “*surge boiling*” and result in an overflow of **HOT** cooking oil. Exercise due care when loading food and observe how hot oil reacts before continuing.
- Be sure the appliance is positioned in a stable, safe location with the casters in the locked position. **DO NOT** operate appliance if not secured. Some jurisdictions may require special anchoring for this type appliance; check local code.
- Allow the appliance to cool for 15-20 minutes before cleaning or servicing.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given adequate instruction and/or supervision concerning its use by a person responsible for their safety. Children should not be restricted from the area around the appliance.
- Prior to sale, cooked food products must be maintained at a minimum temperature of 150°F (65.5°C), or in accordance with governing health regulations
- **Ventless Hood (VH) Models:**
  - Avoid bending the collection fins or breaking the ionizer wires on the Electronic Air Cleaner (EAC) cell. Doing so will prevent the EAC from working properly, and may cause the Fryer to shutdown.
  - After cleaning the EAC cell, **DO NOT** attempt to dry it by installing it in the hood and running the fan to force air dry it, or by heating the fryer. This could potentially damage the EAC power supply and control system, leading to malfunction and voiding the warranty. The EAC filter must air dry at ambient room temperature, preferably overnight.
- Failure to comply with **CAUTION** notices may result in minor to moderate personal injury, damage to equipment or property, and potentially void the warranty.

**CAUTION**

- Components exposed on the control panel surface are impact-sensitive. To avoid damage and maintain proper operation, exercise care when working around or using carts/rolling tables near the appliance.
- The control panel contains a high-tech electronic microprocessor controller. **While the front panel is liquid-resistant, it is not completely wash-down safe.** When cleaning, avoid spraying directly with high pressure spray.
- **DO NOT** install the unit near combustible walls and materials. Failure to maintain safe distance may result in fire.
- When cleaning the appliance:
  - **DO NOT** steam clean.
  - **DO NOT** use products containing chlorine, or other corrosive chemicals.
  - **DO NOT** use abrasive products, steel wool or scouring pads.
  - **DO NOT** use oven cleaners.
- **DO NOT** alter, add attachments, or otherwise modify this equipment!
- Failure to comply with **CAUTION** notices may result in damage to equipment or property, and void the factory warranty.

**NOTE:**

- Users must comply with all appropriate state and local health regulations regarding food service operations, and cleaning and sanitization of food service equipment.
- **For Ventless Hood (VH) Models:**
  - **NEVER** attempt to clean and reuse the Charcoal Filter in the Hood.
  - Appliance and plenum discharge nozzles for the fire suppression system have been factory installed and positioned in the proper alignment. **DO NOT MOVE OR ADJUST, except on recommendation of a certified fire protection specialist.**
  - The decibel level of the Hood when operating is approximately 65 dB.

## 1. Introduction

**THANK YOU** for purchasing *Giles Model GEF or GEF-VH Series Electric Fryer*, manufactured by *GILES Food Service Equipment*; Montgomery, Alabama (USA), hereafter referred to as "Giles". Every unit is thoroughly inspected and tested prior to shipment in an effort to ensure that it will operate flawlessly when received. With proper care and maintenance the appliance will provide years of trouble-free service.

To help protect your investment in this cooking appliance, we recommend that you take a few moments to become familiar with the installation, operational, cleaning, and maintenance procedures contained in this manual. Adherence to these procedures will minimize the potential for costly appliance downtime and repair expense. Please retain this manual for future reference.

**NOTE:** Due to continuing improvements and product enhancements, some of the illustrations shown in this manual might not exactly depict current models.

### 1.1 Construction

18 & 20 ga. 430 series stainless steel. Double-wall cabinet structure.

### 1.2 Standard Features

**Computer Controller** - Accurately controls cooking oil temperature and cooking time. Programmable cooking presets for up to 50 menu items. Constantly monitors fryer status & displays operational instructions, warnings and errors, such as **DRAIN OPEN, LOW OIL LEVEL, MAX. ELEMENT TEMP**, etc. Features **BOIL-OUT** program, **COOL MODE, FORCE FILTER** control, password security, multiple languages settings, and enhanced safety.

**Automatic Basket Lift** - Automatically lowers product when cook cycle is started ... lifts cooked product from hot oil at the conclusion of the cook cycle.

**Built-in Oil Filtration System** - Fully self-contained system, when used properly, can help to extend the life of cooking oil. Features 1/2 HP pump; designed to perform a filter cycle in approximately five (5) minutes.

**Push-To-Start Feature** - After a power interruption, the operator must press **[START]** key on controller to power-up the appliance. This feature will comply with code requirements in some jurisdictions.

#### **GEF-VH Integral Ventless Hood Model Only:**

**Ventless Hood** - Integral, self-contained, type-1, recirculating hood removes grease-laden cooking vapors produced while frying and recirculates cleaned air into the room, eliminating need for conventional venting to the outside. **The GEF-VH model must comply with specific site and installation limitations and restrictions as explained in the Giles Hood Approval document.**

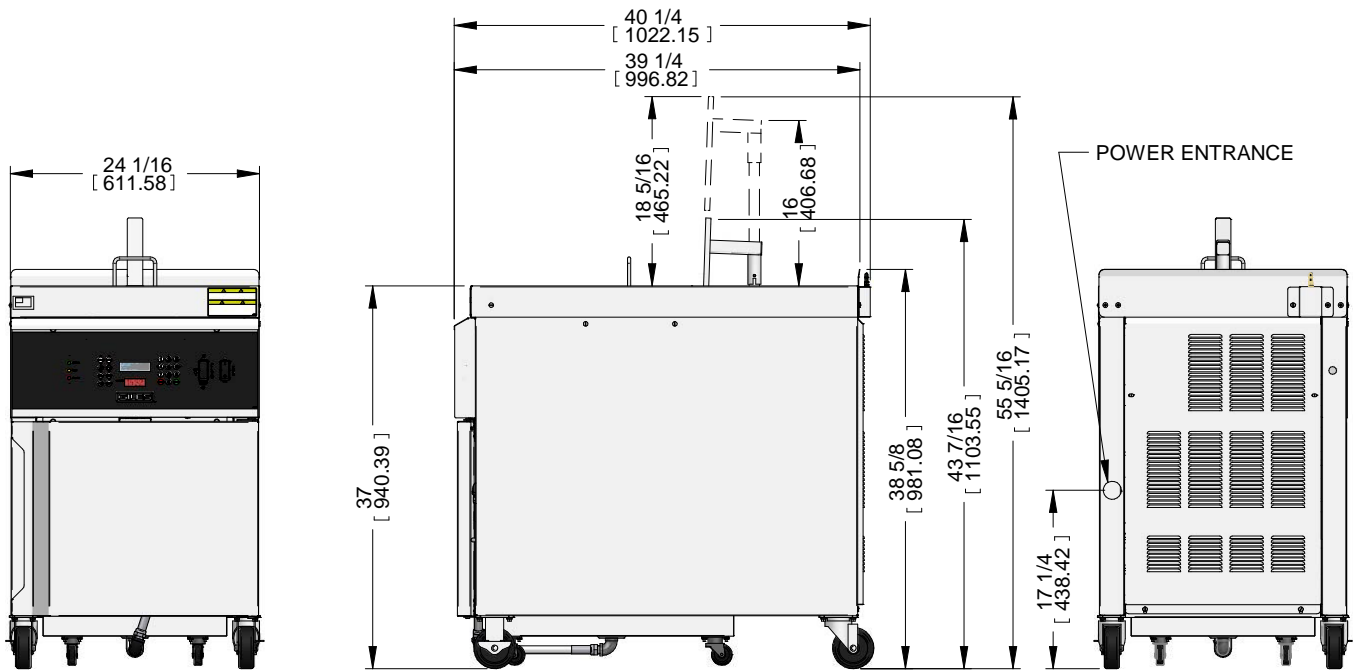
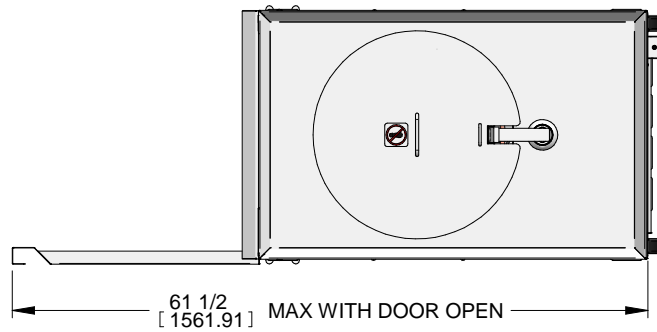
**Fire Extinguishing System** - Self-contained, *Ansul® R-102* wet chemical fire extinguishing system protects unit at all times.

**EAC Cleaning Timer** - Preset timer prompts operators when it is time to clean the *electronic air cleaner (EAC) collection cell*. Daily cleaning is important to maintain peak performance of the air cleaning system. The timer system will disable the appliance if cleaning activities are not performed in a timely manner.



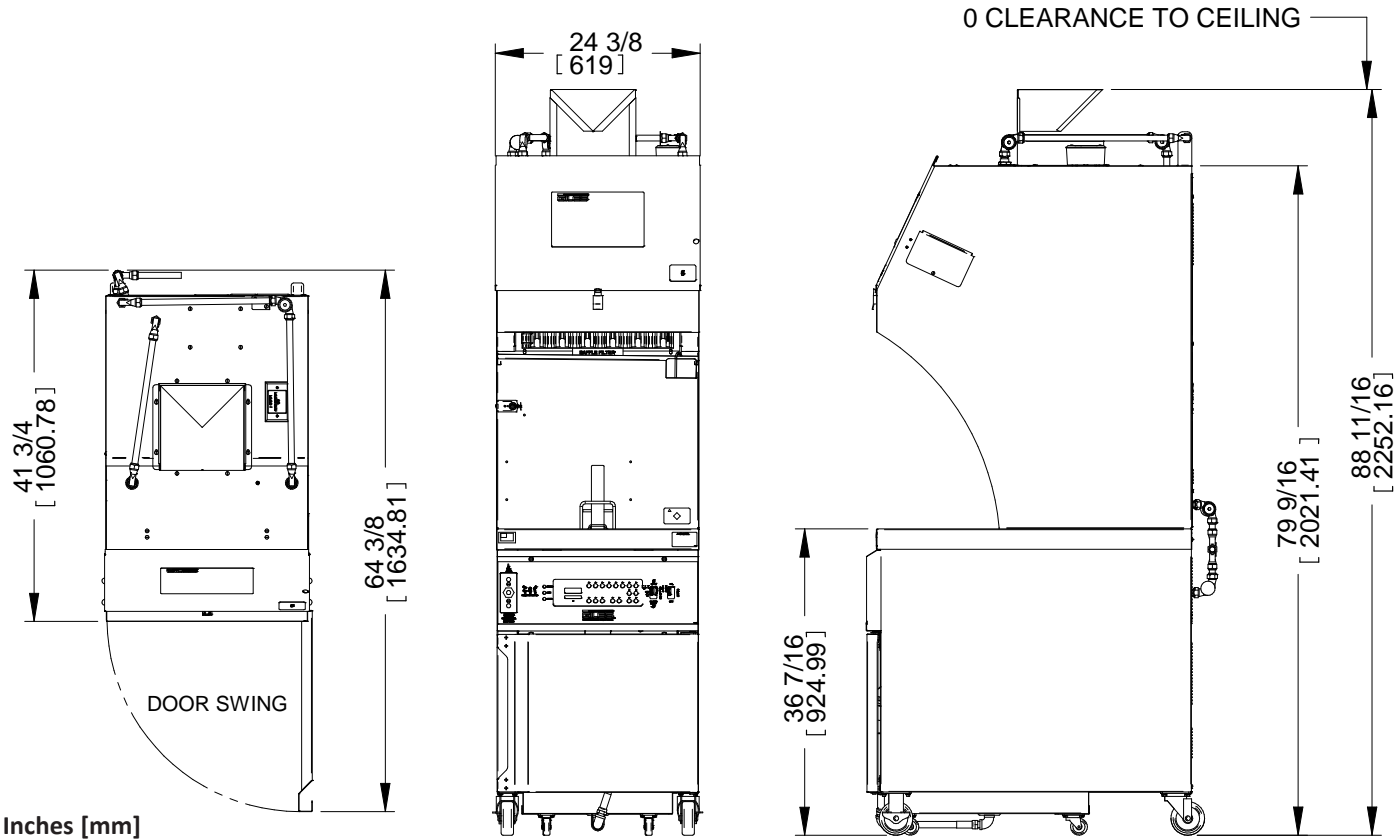
**1.3 Specifications**

**1.3.1 Overall Dimensions: GEF Models**



Inches [mm]

1.3.2 Overall Dimensions: GEF-VH Models



Inches [mm]

**NOTE:** The appliance is equipped with an exhaust air diverter, requiring zero [0"] clearance to ceiling, or overhead obstructions. It is recommend that some adequate space be provided to allow for easy movement of the appliance, if need.

**1.3.3 Agency Certifications**



GEF-VH models are listed to *UL-KNKG (-7 for Canada)* complying with *ANSI/UL-197 & ANSI/UL-710B*

**1.3.4 Basket Sizes**

Model	Basket Size		Volume
	Diameter: in[mm]	Depth: in[mm]	Cubic inch [Cu m]
GEF-400 & 400-VH	12-3/8 [314.2]	10-1/4 [260.4]	1,231.8 [.020]
GEF-560 & 560-VH	14-3/4 [374.7]	10-1/4 [260.4]	1,751.5 [.029]
GEF-720	14-3/4 [374.7]	12-3/4 [323.9]	2,178.6 [.036]

**1.3.5 Cooking Capacity**

Model	Cooking Oil Capacity		Product Capacity (*Chicken)
	Lbs [kg]	Gal [l]	Lbs [kg]
GEF-400 & 400-VH	45 [21]	5.8 [21.9]	14 [6.3]
GEF-560 & 560-VH	60 [27]	7.8 [29.5]	19 [8.6]
GEF-720	75 [37]	9.7 [36.7]	24 [10.8]

*\* 8-way cut, bone-in*

## 2. Installation

This section summarizes procedures necessary for proper equipment installation. To help avoid personal injury or equipment damage, be sure to adhere to all of these recommended procedures.

**Installation expense (materials & labor) is completely the purchaser's responsibility.** Generally, it is advisable to engage the services of a professional commercial kitchen equipment specialist and a licensed electrician to assist with the details of installation. A qualified HVAC contractor may be required when installing the ventless GEF-VH model fryer. Call *Giles Technical Support @ 800.554.4537*, if assistance is required.

***GEF-VH Fryer:*** The hood section is equipped with a self-contained ***Ansul® R-102 wet chemical fire suppression system*** (piping, conduit, nozzles, Automan release mechanism, detector link brackets, fire damper & chemical tank). Field set-up and commissioning must be completed by an authorized ***Ansul Distributor/Dealer*** including, but may not be limited to, installation of proper fusible detector links & cabling, filling and installing the provided wet chemical suppressant tank, installation of remote manual activation station, installing compressed gas discharge cartridge, testing, certifying and arming the system. ***All expenses (parts & labor) necessary for field set-up is the responsibility of the customer and is not included with fryer purchase.***

### 2.1 Appliance Location

#### **IMPORTANT!!**

Before installing a GILES fryer with Integral Recirculating/Ventless Hood, ensure that; A). all necessary approvals from local code authorities have been obtained and B). the installation site complies with the specific requirements and limitations outlined in the ***GFSE Recirculating/Ventless Hood Approval Letter (HAL)***. The HAL is available for review or download at [www.gfse.com](http://www.gfse.com) under the ***SUPPORT*** tab in ***VENTLESS DOCUMENTS***.

To ensure satisfactory performance of the hood section after installation, the intended site **MUST** comply with minimum requirements for kitchen size (>300 sq ft), ceiling height, fresh outdoor air make-up, supplemental exhaust ventilation, clearances, etc. as stipulated in Giles' **Hood Approval Letter**.

- **MAXIMUM** of 1 integral fryer/hood per 300 sq ft of commercial kitchen space.
- Fresh outside air make-up must be equal to a **MINIMUM** of 15 complete room air exchanges per hour.
- Giles makes no representations as to the proper design or layout of an establishment in which the ventless hood will be used. Further, Giles does not perform site inspections prior to installation of any of its units.
- When operating, the hood produces a sound level of approximately **65 dB**.

#### **CAUTION**

- ***DO NOT ALTER, ADD ATTACHMENTS OR OTHERWISE MODIFY THIS EQUIPMENT.***
- ***Failure to comply with installation requirements as specified by the Giles Hood Approval Letter will void the factory warranty.***

**2.1 Appliance Location - continued**

1. The appliance and surrounding area must be free and clear of combustible materials. *GEF fryer = 3" [7.6 cm] ... GEF-VH fryer = 18" [46 cm].*
2. Allow adequate space for easy access when servicing and operating.
3. Be certain that available electrical service in the intended location complies with voltage and amp rating required to power the appliance.
4. Be sure unit will be installed in a stable position and will not unintentionally move. The fryer has locking brakes on front casters ... be sure they are locked when installation is complete. Some jurisdictions may require additional special anchoring of the appliance; check local codes.
5. **Ventless Hood Model Only:**
  - a. Hood exhausts = 510 to 680 CFM
  - b. Average temperature of exhausted air from the hood, after four (4) hours of continuous frying, is approximately 90°F (32°C).
6. This appliance is to be installed, used and maintained in accordance with the **Standard for Ventilation Control, and Fire Protection of Commercial Cooking Operations, NFPA 96.**

If there are questions concerning suitable location of the appliance, contact **Giles Technical Support** at **800.554.4537** or email **services@gfse.com**.

**2.2 Unpacking**

The fryer is shipped on a wooden pallet; secured with high-tensile plastic strapping and enclosed by a wooden framework. The entire unit is wrapped in machine-applied stretch wrap.

**CAUTION**

- The appliance must remain in an upright position during the unpacking process.
- Exercise care when removing the wooden framework from around the unit.
- Units are **very heavy**. Use extreme care and appropriate handling equipment and/or sufficient manpower when lifting or moving the equipment.
- Failure to comply with these **CAUTION** notices may result in minor or moderate injury, equipment or property damage, and void the factory warranty.

**IMPORTANT!**

If crate exhibited evidence of damage or mishandling, immediately inspect the unit and all accessory items and notify the freight carrier of any damages. Typically it is the purchaser’s responsibility to file and negotiate freight damage claims.

Continued on Next Page 

## 2.2 Unpacking - continued

1. Carefully cut and remove the shipping wrap and strapping. Remove and set aside all auxiliary items that are packed with the unit. Some items may be found packed in the *Filter Pan* inside fryer cabinet. Keep all of these items in a secure place for future use.
2. Use appropriate tools and work practices to remove the wooden crating from around the unit.
3. Carefully remove the appliance from the shipping pallet. The unit is extremely heavy, GEF models weigh more than **300 lbs [136 kg]**; GEF-VH models more than **500 lbs [227 kg]**.



Great care should be taken when lifting or moving the unit to prevent personal injury or equipment damage. Use appropriate handling equipment or sufficient manpower. **IMPORTANT! Be aware that the GEF-VH model is somewhat top-heavy.**

### IMPORTANT!

Giles is not liable for damages to the unit caused by use of improper material handling equipment or poor work practices, or for personal injuries or property damage which may be incurred during installation of this equipment. Installation is the sole responsibility of the purchaser, unless previous arrangements have been made in writing.

## 2.3 Electrical Requirements

### CAUTION

- Fryers must be properly grounded accordance with local code, or in the absence of local code, with the National Electrical Code, ANSI/NFPA 70. Improper grounding may result in electrical shock to users. Check local electrical code to ensure proper grounding.
- Always consult a certified electrician, or other qualified service technician, prior to installation to ensure that electrical circuits are of sufficient rating for the appliance load.
- **GEF Fryers** are manufactured for the various voltage/Hz/phase shown on **Table 2.3 below**. Check the Serial/Data Label inside the cabinet or attached to the rear panel to determine the electrical service required.

**Table 2.3 Electrical Requirements**

Model	Voltage	Hz	Ph	kW	Amps			Breaker Required
					L1	L2	L3	
GEF-400	208	60	1	10.0	48	48	--	60
	208	60	3	10.0	29	29	29	40
	240	60	1	10.0	42	42	--	50
	240	60	3	10.0	25	25	25	35
	380	50	3	9.6	14	14	14	20
	415	50	3	10.0	14	14	14	20
GEF-400-VH	208	60	1	10.4	50	50	--	60
	208	60	3	10.4	30	30	30	40
	240	60	1	10.4	44	44	--	60
	240	60	3	10.4	26	26	26	35
	380	50	3	9.97	15	15	15	20
	415	50	3	10.4	15	15	15	20
GEF-560	208	60	1	15.0	72	72	--	100
	208	60	3	15.0	43	43	43	60
	240	60	1	15.0	63	63	--	80
	240	60	3	15.0	38	38	38	50
	380	50	3	14.8	21	21	21	30
	415	50	3	15.0	21	21	21	30
GEF-560-VH	208	60	1	15.4	74	74	--	100
	208	60	3	15.4	44	44	44	60
	240	60	1	15.4	64	64	--	80
	240	60	3	15.4	38	38	38	50
	380	50	3	14.8	21	21	21	30
	415	50	3	15.4	22	22	22	30
GEF-720	208	60	3	20.0	58	58	58	80
	240	60	3	20.0	49	49	49	60
	480	60	3	20.0	25	25	25	35
	380	50	3	19.2	28	28	28	35
	415	50	3	20.0	28	28	28	35

## 2.4 Electrical Connections

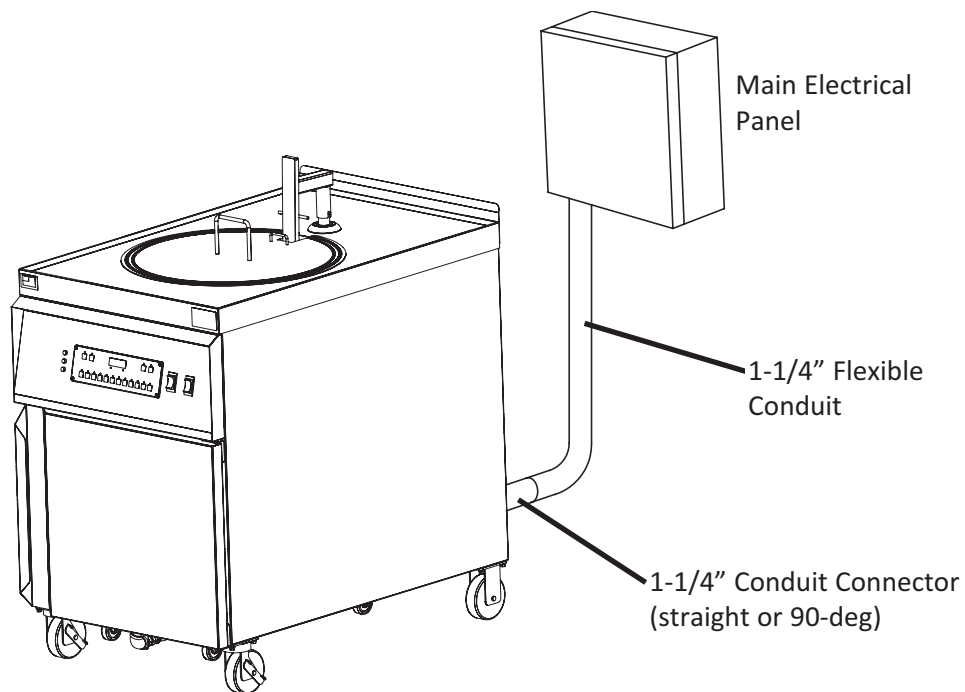
### NOTE:

Electrical installation materials (breakers, conduit, fittings, wire, etc.) and labor shall be supplied by the customer. Work should be performed by a qualified electrician, or service technician.

Installation must comply with local code requirements. Giles is not responsible for code compliance with regard to installation and use of this appliance.

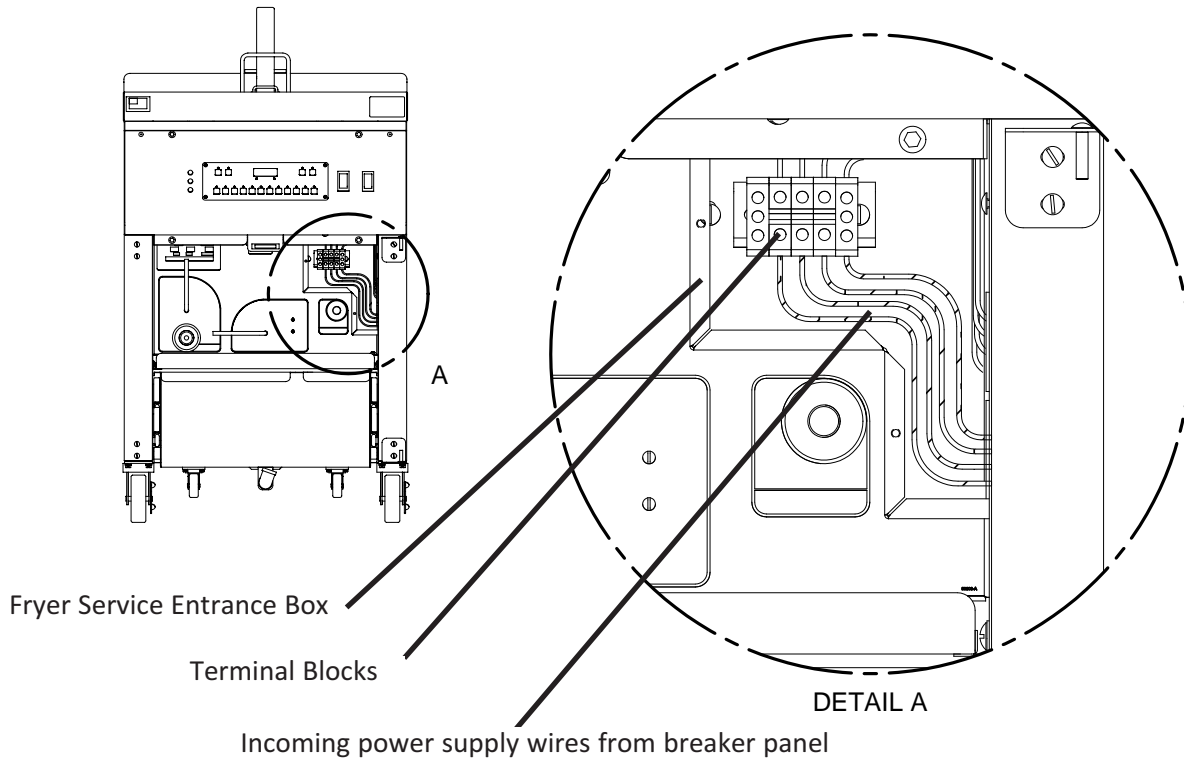
1. As needed, install appropriate sized circuit breaker in main electrical panel. See **Table 2.3**.
2. Connect 1-1/4" flexible conduit from main electrical panel to the Fryer. Attach conduit to rear of the Fryer with appropriate conduit fittings. Allow enough length so that the Fryer can be moved easily for cleaning and servicing. See **Figure 2.4.1**.
3. Open Fryer Cabinet Door and remove Service Entrance Box Cover. See **Figure 2.4.2**.
4. Route appropriately sized power wires from the circuit breaker in the main panel through the wire chase inside cabinet wall to the front Service Box.
5. Connect power wires to the appropriate Terminal Blocks in the Service Entrance Box. See **Figure 2.4.2**.
6. Reinstall Service Entrance Box Cover and close the cabinet door.

### 2.4.1 Conduit Routing





**2.4 Service Box Connections**



**2.5 Ventilation of Non-Ventless Fryer**

**NOTE:**  
 Guidelines and codes for ventilation system requirements differ from locale to locale. Always consult the local **Authorities Having Jurisdiction (AHJ)** to ensure compliance.

Consult a professional ventilation or HVAC company for assistance in determining whether existing systems are sufficient to accommodate this equipment, or in designing a ventilation hood system to comply with code requirements.

**2.6 Ventless Hood Clearances (VH Model)**

GEF Ventless Hood Fryers are equipped with an exhaust air diverter that directs exhaust air horizontally (side and rear). The minimum clearance from the top of the diverter to the ceiling is 0" [0 mm], however it is recommended that adequate space be provided to allow easy movement of the unit if required. The area around the sides and rear of the diverter must remain free of obstruction to allow proper air flow.

**DO NOT attach any additional ductwork the hood exhaust in an attempt to redirect airflow to another area. The back-pressure created will reduce hood capture, causing poor or unsatisfactory performance.**

## 2.7 Ventless Hood Fire Suppression System

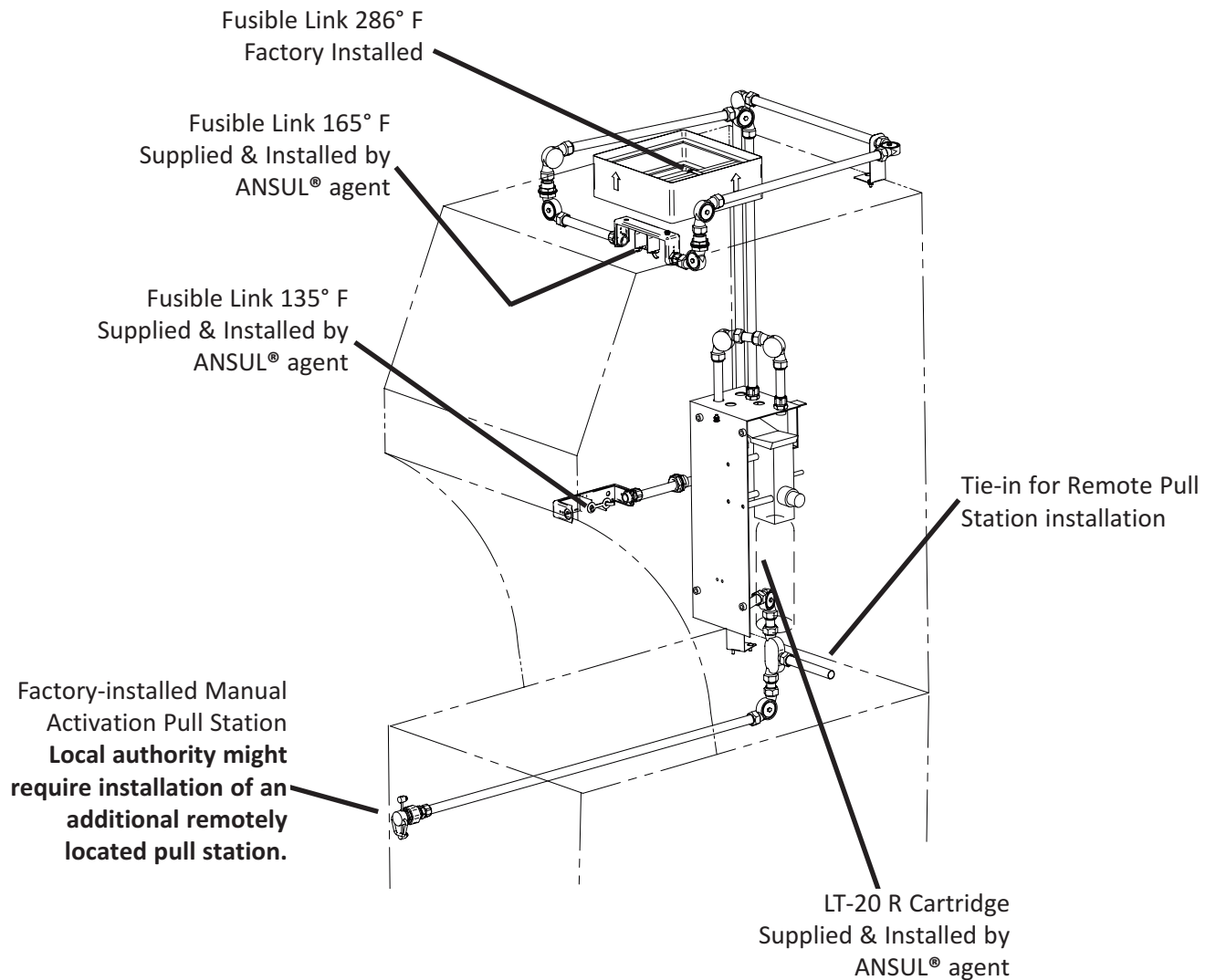
The fire suppression system in the Ventless Hood fryer is an **Ansul® R-102 Restaurant Fire Suppression System (UL-197 listed)**. The system is designed and listed to provide fire protection for the fryer. It is a mechanically activated system which automatically provides constant protection against accidental fire. System is self-contained, including piping, discharge nozzles (appliance/plenum), fusible link brackets, fusible link cable conduit, Automan release mechanism, fire damper, 1.5 gal. tank and a built-in manual activation station.

**Final field set-up and commissioning of the system *must* be performed by an authorized ANSUL® agent in accordance with the appliance’s listing and shall include charging with the suppressant chemical, installation of fusible links + cable, installing the compressed gas firing cartridge, testing, certifying and arming the system. Some jurisdictions may require that an additional, remotely located, manual activation pull station be installed.**

**Fryer WILL NOT heat until the fire system is armed.**

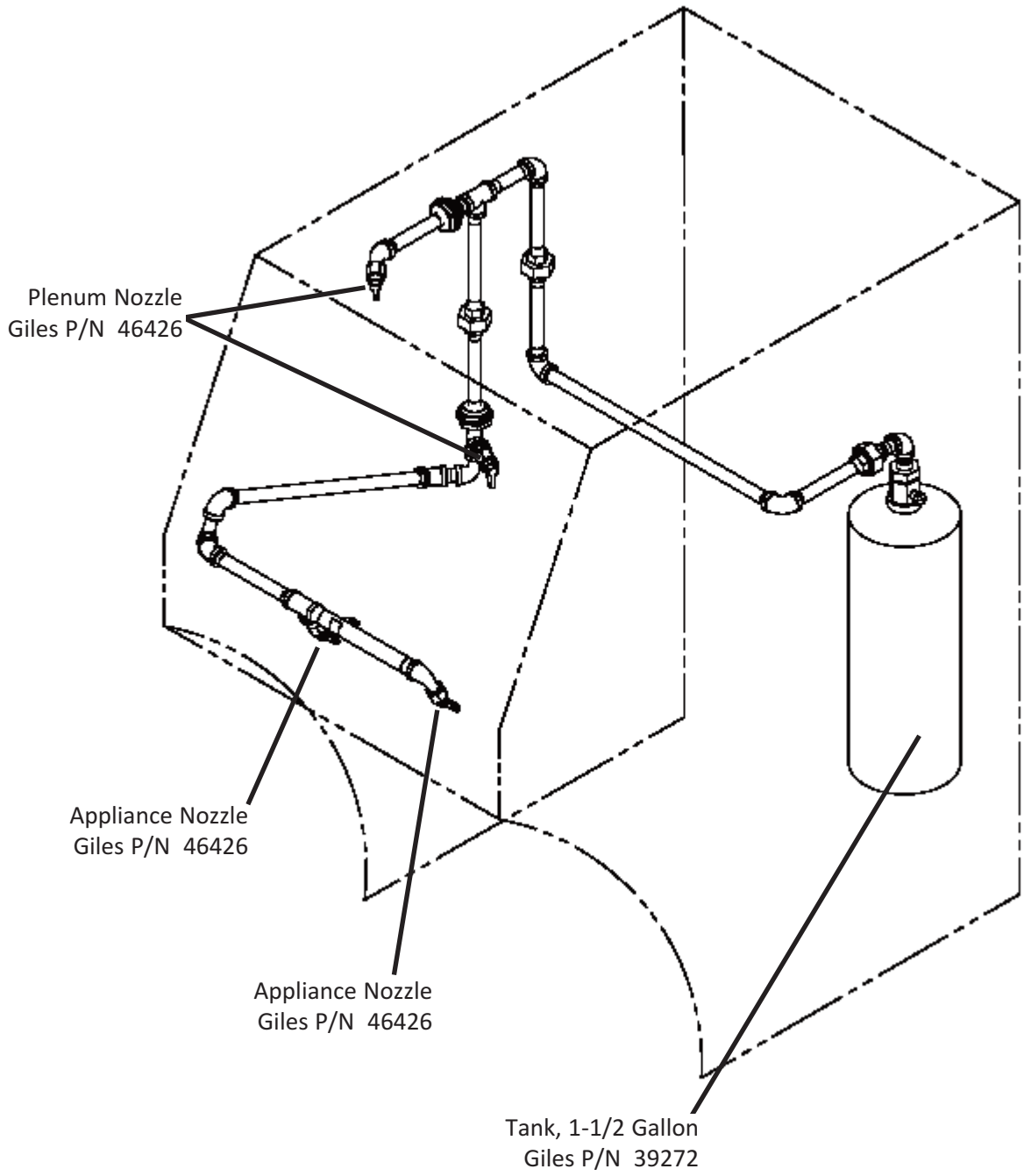
**All expenses associated with field set-up and commissioning are NOT included with purchase and is the responsibility of the purchaser.**

## 2.8 Fusible Link and Gas Cartridge Locations



**2.9 Fire Extinguisher Nozzle and Tank Locations**

All extinguisher system discharge nozzles have been factory installed and aligned in the proper position. **DO NOT MOVE OR ADJUST**, except on advice of a fire protection specialist.



**NOTE:**

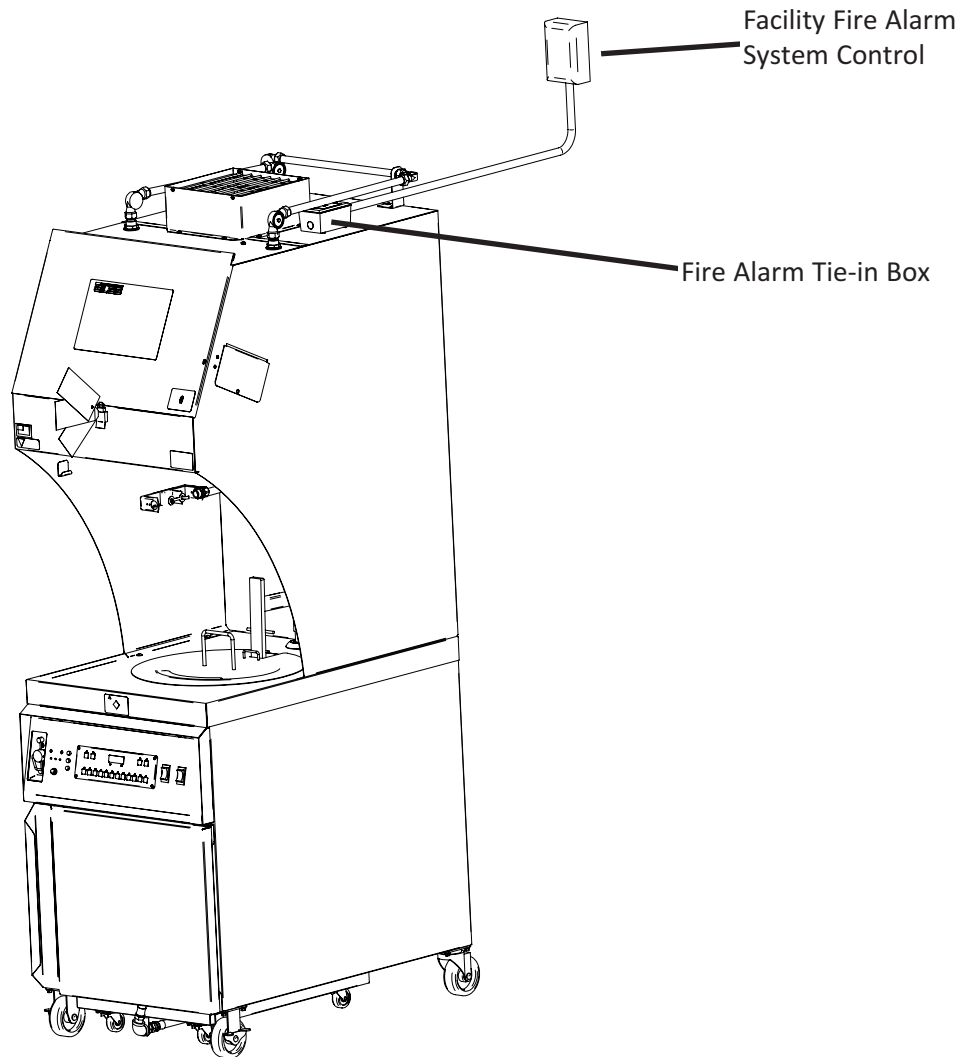
Tank is not factory-installed. Packed in separate carton and must be filled and installed by *Ansul*® technician.

## 2.10 Fire Alarm Connection

Connects fire suppression system to the building fire alarm system for sending signal in the event that the fire extinguishing system is activated.

### Fire Alarm Connection:

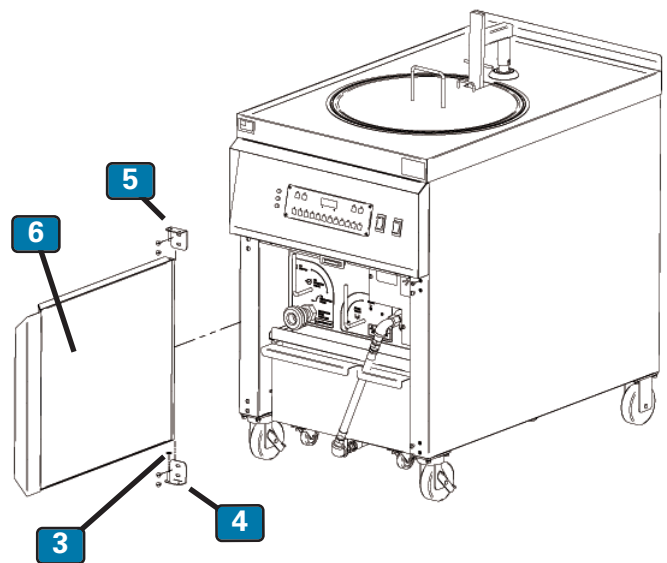
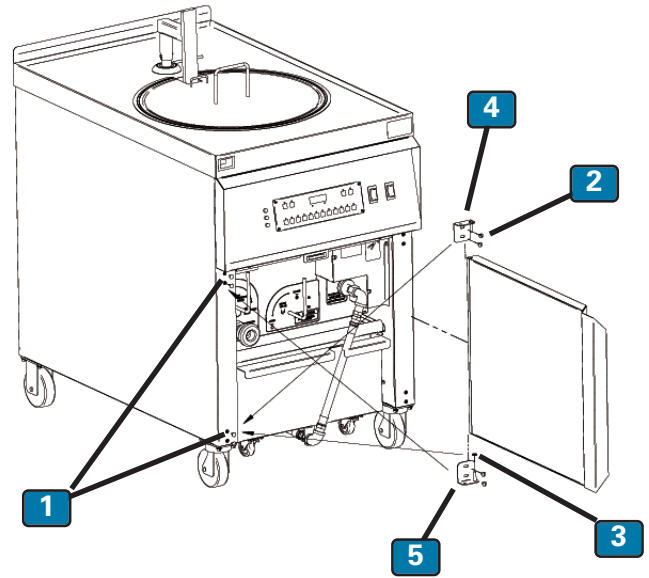
1. Remove Cover on Fire Alarm Tie-In Box and install appropriately sized conduit and wire to the facility's fire alarm system. Allow enough length such that the appliance can be moved for access when cleaning and servicing.
2. Make appropriate connections.
3. Reinstall Fire Alarm Tie-In Box Cover.



**2.11 Changing the Door Swing**

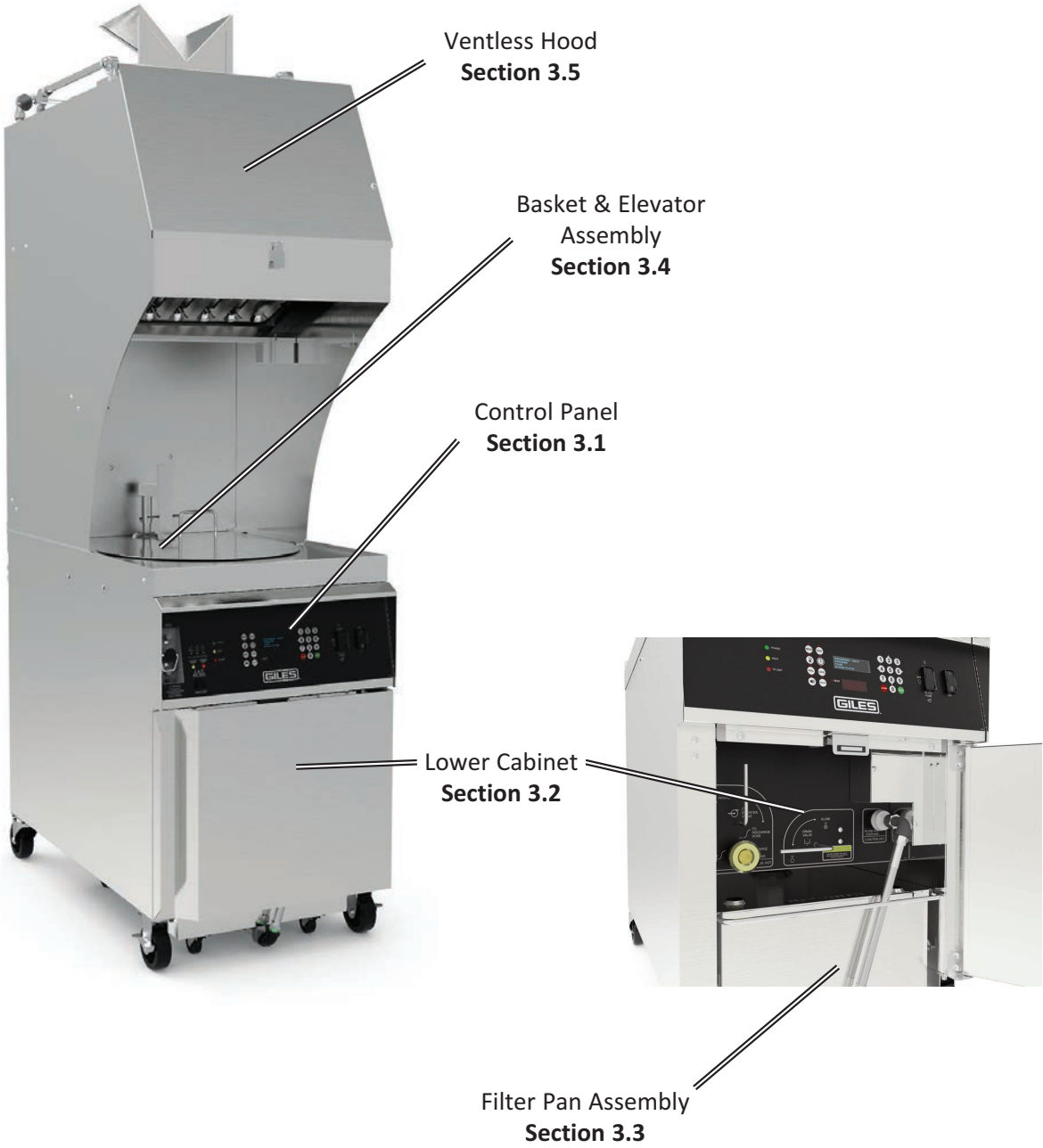
Certain situations may require that the door swing direction be reversed to allow easier access to the lower cabinet. This procedure is described below.

1. Turn **OFF** fryer power.
2. Remove (4) screws ① on the left side of the fryer cabinet and retain.
3. While supporting door; remove screws ② (2-top & 2-bottom) holding hinges to the cabinet; remove door along with the hinges. Retain the plastic washer ③ from the bottom hinge.
4. Flip the top hinge ④, move to the bottom corner on the opposite cabinet side and attach with screws removed in Step-1 ... do not tighten. Place the saved plastic washer ③ onto the hinge pin.
5. Flip the cabinet door and hang on the hinge pin.
6. Flip the bottom hinge ⑤, move it the top corner on opposite side and insert pin into top of door. Attach hinge to cabinet with screws removed in Step-1 ... do not tighten.
7. Check door swing and levelness; adjust as needed. Securely tighten all hinge screws.
8. Install (4) screws (2-top & 2-bottom) removed in Step-3 to fill holes on right cabinet side.
9. Power up fryer.
10. If desired, order a new **Quick Reference Door Label (Part No. 60802) ⑥** and apply over existing label. Available through a *Giles Food Service Equipment* dealer or service agent.



## 3. Overview

The following section is a brief overview of the components, functions, and accessories of *Giles GEF and GEF-VH Series Electric Fryers*. Please review this section carefully before attempting to operate the appliance.



3.1 Control Panel



\* Ventless Hood (VH) Models Only

## 3.1 Control Panel

Item	Description	Function
1	<b>POWER</b> Switch	Turns fryer power <b>ON/OFF</b> . Press top portion to place in <b>[ON]</b> position for operation.
2	<b>SELECTOR</b> Switch	3-position switch selects mode ... <b>[COOK • OFF • FILTER PUMP]</b> . Heating elements only operate when in <b>[COOK]</b> position. Place in <b>[FILTER PUMP]</b> position to run filter pump. Center position is <b>[OFF]</b> .
	Controller	Controls & monitors functions, oil temperature, cook time, etc. Stores 50 programmable Menu Item cook setting presets. Displays status, operational messages, errors and alarm conditions.
4	<b>HI-LIMIT</b> Indicator	The red high-limit Light illuminates when an overheat safety relay turns <b>OFF</b> power to heating elements. Should this light come on, discontinue operation and refer to the <i>Troubleshooting Section</i> . <b>NEVER COOK IN A FRYER THAT CONTINUES TO GIVE A HI-LIMIT ALARM!</b>
5	<b>HEAT</b> Indicator	Amber light illuminates when heating elements are energized. When set-point temperature is reached, the light turns <b>OFF</b> . Light will cycle <b>ON</b> and <b>OFF</b> during normal operation.
6	<b>POWER</b> Indicator	Green Power Light is <b>ON</b> whenever the <i>power switch</i> is in the <b>[ON]</b> position.
*7	<b>ON</b> L.E.D. Indicator	The <b>[ON]</b> indicator illuminates when the <i>Electronic Air Cleaner (EAC)</i> power supply is <b>ON</b> . Only light illuminated during normal operation.
*8	<b>.WASH &amp; CHECK</b> L.E.D. Indicators	When one of these lights is <b>ON</b> , there is a problem with the EAC system and indicates it has <u>stopped</u> cleaning the air. The cell is either excessively dirty, not making good contact, damaged, or shorted out. <b>IMPORTANT! Do not rely upon these indicators as the signal for routine cleaning; EAC Cell must be cleaned daily to maintain peak performance and to extend the useful life of charcoal filters.</b>
*9	Fire Extinguisher Manual Pull Handle	Pulling this handle will manually activate the fire suppression system. Extinguishing system also activates automatically.
*10	EAC Cleaning Timer <b>[CHANGE SOON]</b> Indicator	Turns <b>ON</b> when timer enters <b>[WARNING MODE]</b> , indicating that the EAC cell needs to be cleaned within the next <b>24 hours</b> .
*11	EAC Cleaning Timer <b>[CHANGE NOW]</b> Indicator	Turns <b>ON</b> when timer enters <b>[TIMEOUT MODE]</b> , indicating that the maximum time between cleanings has expired. Cell must be cleaned immediately. Power to fryer heating elements is turned <b>OFF</b> until cleaning is performed, then timer will automatically reset.
*12	EAC Cleaning Timer <b>[SNOOZE]</b> Button	Pressing button, after <b>[TIMEOUT]</b> is active, returns timer to <b>[WARNING MODE]</b> and allows fryer to be used for <b>two (2) additional hours</b> . Only two (2) <b>[SNOOZE]</b> periods are available. Afterward, power to fryer heating elements is locked-out until cell is cleaned.

\* Ventless Hood (VH) Models Only



3.2 Lower Cabinet Area



Due to continuing improvements and product enhancements, illustrations might differ slightly from actual unit.

## 3.2 Lower Cabinet Area

Item	Description	Function
1	Diverter Valve Handle	Directs filter pump discharge to either the fry pot or to the Waste Oil Discharge Hose.
2	Quick Connect/Disconnect - Oil Discharge Hose	Connects the Waste Oil Discharge Hose to fryer plumbing for removal of waste oil from.
3	Drain Valve Handle	Operates the fry pot Drain Valve. Always be sure that valve is closed prior to adding cooking oil or boil out solution. <b><i>As a safety precaution, heating elements are disabled if valve is not completely CLOSED.</i></b>
4	Quick Connect/Disconnect - Filter Pan Hose	Connects the Filter Pan Assembly to the fryer Oil Filtration System.
5	Filter Pan Assembly	Collects oil when drained from pot. Contains filter media for filtering and reconditioning cooking oil after use.
6	Filter Pan Cover	Helps minimize splash when hot oil is drained into the filter pan. Helps safeguard against foreign material contamination of oil during the filtering process. Sits loosely atop filter pan and is easily removed for cleaning.
7	Cabinet Door	Provides access to lower cabinet functions. If needed, swing of the door is field reversible.
8	Door Magnet	Keeps door closed during operation

**3.3 Filter Pan Assembly**



\* Not included, Optional Item

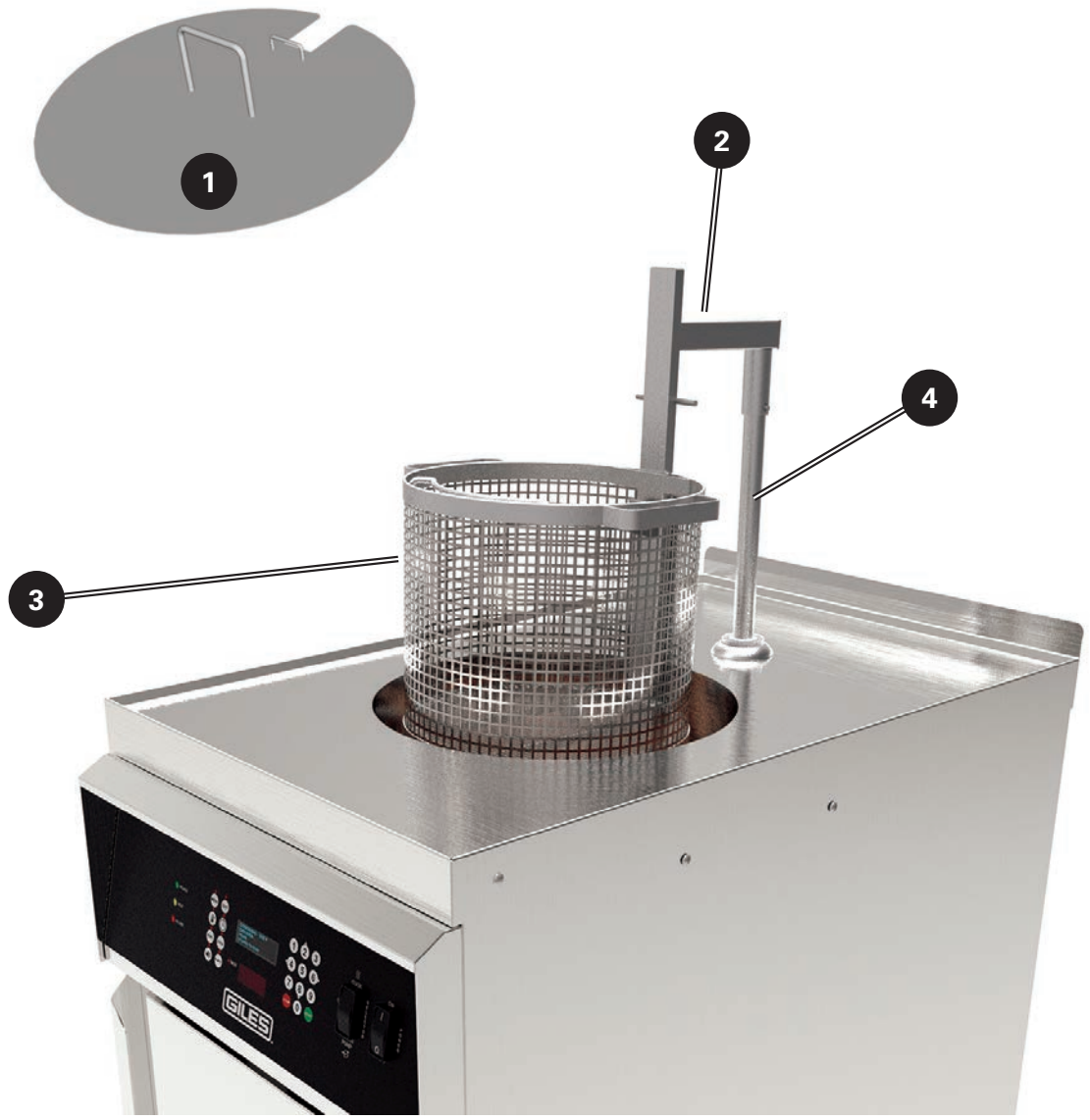
Due to continuing improvements and product enhancements, illustrations might differ slightly from actual unit.

## 3.3 Filter Pan Assembly

Item	Description	Function
*1	Crumb Screen <b>(Optional)</b>	Captures large crumbs and other cooking residue as cooking oil is being drained into filter pan.
2	Hold-down Frame	Holds and seals the filter media in the bottom of the Filter Pan.
3	Filter Paper	Standard paper filter media; filters fine particles of sediment from the cooking oil during the a filter cycle. One (1) piece of paper media must be used for proper filtering. A filter aid such as Giles Filter Powder should also be used to recondition the oil.
4	Hold Down Levers (4)	Locks the hold-down frame in position.
5	Filter Pan Quick Connect/Disconnect Hose	Connects filter pan to the oil filtration system. The hose must be disconnected for filter pan removal.
6	Filter Pan	Collects and filters cooking oil drained from the fry pot. Removable for cleaning and refreshing filter media. A perforated screen is permanently attached in the Pan bottom to support the filter media, and should media become torn, screen prevents larger debris from entering the Filter Pump. <b><i>THIS IS NOT A FILTER ... FILTER MEDIA MUST ALWAYS BE USED!</i></b>
*7	Stainless Steel Filter Screen <b>(Optional)</b>	Renewable, stainless micro-mesh screen filter media ... direct replacement for filter paper. Can be removed, cleaned and reused. Features silicone edge gasket for proper seal.
8	Filter Pan Cover	Removable cover helps to prevent splash and splatter when draining oil from the fry pot. Can help keep inside of Cabinet cleaner.

\* Not included, Optional Item

3.4 Basket & Elevator Assembly



Due to continuing improvements and product enhancements, illustrations might differ slightly from actual unit.

## 3.4 Basket & Elevator Assembly



Item	Description	Function
1	Pot/Basket Cover	Covers fry pot while product is cooking. When used as intended, prevents hot cooking oil from splashing or splattering from pot.
2	Basket Carrier	Attaches the fry basket to basket lift shaft; holds it in the proper position for lowering, cooking and raising.
3	Basket	Contains product during cooking.
4	Basket Lift Assembly	Automatically lowers basket into oil for cooking and lifts it from oil at the end of the cooking cycle. <b>Located inside Cabinet.</b>

3.5 Ventless Hood (VH Model Only)









## 3.5 Ventless Hood (VH Model Only)




Item	Description	Function
1	Filter Access Cover	Provides access to the filter chamber and plenum area ... EAC Cell & Charcoal Filter. The cover must be in place and latched before the fryer will power up.
2	Charcoal Filter	<u>Helps</u> to control cooking aromas in the exhaust air. Filter should typically be replaced monthly. <b>NEVER attempt to clean the Charcoal Filter; it is NOT renewable.</b> It is advisable to keep a spare filter on hand (Giles #30248) for quick exchange when needed! <b>NOTE: No filter will completely eliminate aromas from the air.</b>
3	EAC Collector Cell	<i>Electrostatic Air Cleaner</i> removes grease vapors and smoke generated while cooking. The Cell is completely renewable and <b><i>should be cleaned daily to maintain peak performance.</i></b> <b>Appliance power must be turned OFF before removing the EAC Cell for cleaning.</b> 
4	Baffle Filter	The first stage of the air cleaning system. It is easily removed for daily cleaning. <b>DO NOT remove the baffle filter while the fryer is operating. Doing so exposes electrically charged parts and can lead to electrical shock.</b> 
5	Grease Drip Cup	Collects grease condensate generated by the baffle filter. This cup should be cleaned daily, or as needed.
6	Grease Drip Cup Safety Pin	Secures the Grease Drip Cup, preventing it from unintentionally falling from the holding bracket.
7	Diverter Exhaust Stack	Located atop the hood fan discharge outlet. Diverts exhaust air horizontally to the side and rear. Allows for [0"] clearance requirement between the ceiling and top of the diverter. It is advisable to allow space for easier moving the appliance when needed.
8	Basket Cover Hanger	Provides a convenient place to hang the Basket Cover when loading, unloading, or stirring product. One is located on either side of the hood.





**3.6 Accessories (Included)**

Part	Description/ Part Number	Function
	<p>Kettle Drain Brush P/N 71025</p>	<p>Use for cleaning the Fry Pot and Pot Drain in the event of clogging.</p>
	<p>Stirring Utensil P/N 77775</p>	<p>Use for stirring hot oil and to agitate product while cooking to prevent sticking.</p>
	<p>Pot Brush P/N 71100</p>	<p>Use for cleaning Fry Pot and Heating Elements.</p>
	<p>Crumb Shovel P/N 30059</p>	<p>Use to remove sediment from the surface of the filter media in the Filter Pan after a filtering cycle.</p>


## 3.6 Accessories (Included)

Part	Description/ Part Number	Function
	<p>L-Shaped Brush P/N 73233</p>	<p>Use for cleaning between Heating Elements and the space between the pot wall and the elements.</p>
	<p>Waste Oil Discharge Hose P/N 33667</p>	<p>Use for removing waste cooking oil from Fryer.</p> <p><b>NOTE: NOT to be used to wash down Fry Pot.</b></p>
	<p><b>(1) Sample Can</b> Foaming Crystal Cleaner/Degreaser <b>P/N 41510</b> <b>12-count Case</b> NSF approved</p>	<p>Spray on foaming degreaser for simple and effective cleaning the EAC collector cell.</p> <p><b>This is GILES recommended cleaner.</b> It is readily available through Giles dealers or on-line distributors, as well as many nationwide retail outlets.</p>

**3.7 Accessories (Not Included, Purchased Separately)**

Part	Description/ Part Number	Function
	<p>Filter Paper P/N 60810</p>	<p>Paper filter media for the Filter Pan.</p>
	<p>Filter Powder P/N 72004</p>	<p>Filtering aid to help clean the cooking oil during the filtering cycle. Removes soluble impurities from oil.</p>
	<p>Fryer Boil-Out P/N 72003</p>	<p>Add to water when performing Fryer Boil-Out, cleans the Fry Pot and removes cooking residue.</p>

## 3.7 Accessories (Not Included, Purchased Separately)

Part	Description/ Part Number	Function
	<p>Filter Pan Crumb Screen P/N 39246</p>	<p>Catches larger crumbs and pieces of cooking residue as oil drains into the Filter Pan for filtering. Helps reduce potential of clogging the filter system.</p>
	<p>Stainless Steel Renewable Filter Screen P/N 41014</p>	<p>Reusable replacement for Filter Paper. Durable stainless steel media can be cleaned and reused many times. Provides same filtering performance as paper media.</p>
	<p>Giles Oil Caddy P/N 79187</p>	<p>Portable, waste oil disposal container with capacity for 80 lbs of waste cooking oil. Does not need electricity; manually operated pump.</p> <p><b>Note: For use with filtered, warm oil only. No crumbs or debris.</b></p>



**Notes:**

## 4. Preparation for Operating Fryer

Giles takes pride in quality of workmanship. Every effort has been made to ensure that new equipment is in perfect operating condition when received. Every unit must pass rigorous quality control testing prior to shipment and to further ensure that it meets your expectations, it is recommended that this operational checkout and preparation be performed prior to using the fryer for the first time.

Before attempting to perform these steps, please refer to *Section 3* and become familiar with various controls and their function, and after fully understanding that information, perform the steps described in the following sections to confirm the unit's functionality and prepare it for operation. Precisely adhere to these instructions, otherwise equipment damage or malfunction could result.

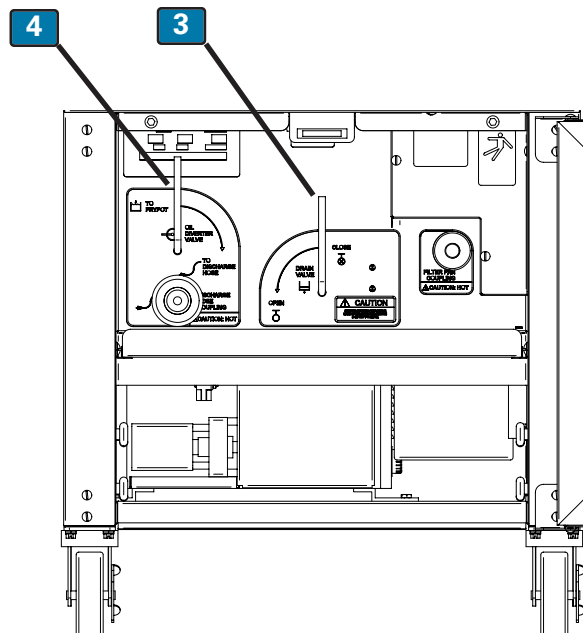
### 4.1 Initial Fryer Set-up

Be sure that the unit is set-up as follows before proceeding.

1. Ensure that the **Power Switch** ① and the **Selector Switch** ② are in the [OFF] position.
2. Open the cabinet door and remove the filter pan.



3. Be sure the **Drain Valve Handle** ③ is in the [CLOSED], vertical position.
4. Be sure the **Oil Diverter Valve** ④ is in the [TO FRYER], vertical position.
5. If not already done, remove the Basket Cover, Basket Carrier, and Cook Basket.



4.2 Power Test

The following test confirms that the unit is properly receiving power.

1. Set up unit as described in **Section 4.1**.
2. Be sure the main circuit breaker powering the unit is **ON**.
3. Place the **Power Switch** ① in the **ON** position. The green **POWER** light ② will turn **ON** and the controller will power-up.



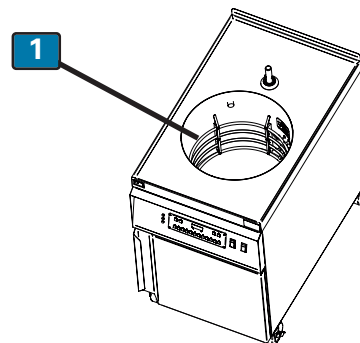
The message **[HOLD]** is shown on the **Lower Display**. An alarm sounds and a **“POWER FAILURE”** message is shown on the **Upper Display**. If all of this occurs, return **Power Switch** to **[OFF]** and see **Section 4.3**; if not, refer to troubleshooting procedures in **Section 8.1**.

4.3 Heating Element Test

The following test confirms that the heating elements are being energized.

**CAUTION** DO NOT touch the heating elements. They quickly become very hot, and skin contact may result in severe burn injury.

1. Set up unit as described in **Section 4.1 ... Power Switch [OFF]**.
2. Place the **Power Switch** ② in the **[ON]** position; allow controller to power-up.
3. When the alarm sounds, press the **[START]** key and controller enters **PREHEAT**. Menu item preset appears on the **Upper Display** ③ and controller should call for **HEAT** (small red light adjacent to **Lower Display** turns **ON**).
4. Liberally dampen heating elements ① with a wet sponge, or towel, such that visible moisture remains.
5. Place the **Selector Switch** ④ in **[COOK]** position. Amber **HEAT** light on control panel should turn **ON**. Leave switch in **[COOK]** for **NO MORE THAN 10 -15 SECONDS** and then return to **[OFF]**. Leave power **ON**.
6. The moisture on the elements should quickly dry and heat should be felt rising from the pot.

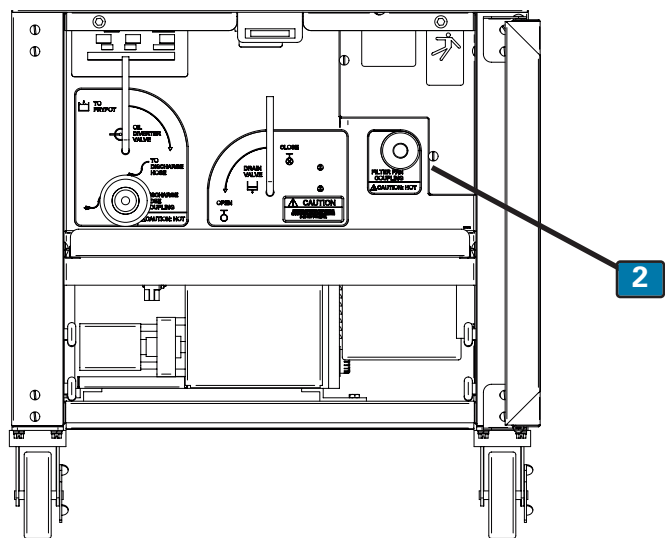


### 4.4 Filter Pump Test

The following test confirms that the Filter Pump is operating properly.

1. Confirm **Power Switch** is [ON].
2. Open cabinet door. **If not done previously, disconnect and remove filter pan .**
3. Firmly press the palm of the hand over the filter pan connection fitting (2).
4. While covering the opening with the hand, set the **Selector Switch** (3) to the [FILTER PUMP] position. Pump should start ... if suction is felt, it is operating correctly. Return switch to [OFF]. **Allow pump to run ONLY long enough to check for suction.**

If no suction is felt, or if air seems to be blowing out of the fitting, refer to the troubleshooting procedures in **Section 8.2**, otherwise proceed to **Section 4.5**.



Should any of the preceding tests fail and you are unable to resolve an issue, or if there are other alarms, errors or malfunctions that occur while performing the tests, a factory-authorized service technician may be needed to evaluate the problem. All new equipment is covered by *Giles 2-Year Parts & Labor Warranty* and our *Technical Support* associates can assist with dispatching a service agent, or may be able to resolve the issue with a phone call. Contact *Support* at 800.554.4537 or email [services@gfse.com](mailto:services@gfse.com).

### 4.5 Perform Boil-Out Procedure

Perform a Boil-Out Procedure to remove dirt/debris that may have accumulated during shipment, or residue remaining from manufacturing processes. See **Section 6.1, Boil-Out Procedure**. After the Boil Out procedure see **Section 4.6**.



#### 4.6 *Finalize Preparation - Clean Filter Pan & Accessories*

Thoroughly clean the filter pan to remove dirt/debris that may have accumulated during shipment, or residue remaining from manufacturing processes. See **Section 6.2, *Cleaning the Filter Pan and Replacing Filter Paper after Boil Out.***

Wash accessory items (cook basket, basket lift carrier, stirring utensil, crumb shovel, etc) in warm soapy water, rinse and dry thoroughly.

Inspect unit for protective adhesive film which may remain on the appliance. Some of this film typically remains on some surfaces as added protection during shipment. Remove all such material from surfaces and clean the entire exterior of the unit with a good quality stainless steel cleaner/polish. ***DO NOT use cleaners that are abrasive or contain caustic chemicals.***

Fryer is now ready for use. Please refer to **Section 5, *Fryer Operation.***


### 5. Fryer Operation

This section describes operational procedures for *Giles Model GEF & GEF-VH Electric Fryers*.

#### **⚠ DANGER**

- Turn off the fryer power switch and supply power at main electrical panel prior to cleaning or performing maintenance.
- **DO NOT** wash down the this equipment with water spray from a spray hose, or other pressure-type washing equipment.
- Failure to comply with **DANGER** notices will result in serious injury, even death, damage to equipment or property and void the factory warranty

#### **⚠ WARNING**

- **DO NOT** use or store flammable liquids, or materials that produce flammable vapors, in the vicinity of this or any other appliance!
- **DO NOT (or ALLOW OTHERS to) stand or step onto the top of the fryer for any reason.** Very serious injury can result from slips and falls, or from bodily contact with extremely **HOT** cooking oil in the cooking vat (**excess of 330°F/166°C**). Removable covers often placed over cooking vats are **NOT designed to, and WILL NOT, support the weight of a person.** 
- Failure to comply with **WARNING** notices could result in serious injury, even death; damage to equipment and/or property and will void the factory warranty.

#### **⚠ CAUTION**

- Be sure the fryer is positioned in a stable, safe location with front caster brakes locked.
- Exercise caution when operating and cleaning. **To avoid personal injury, wear thermal protection (gloves or mitts) while tending the appliance.** Certain parts of fryer become very **HOT** during operation; temperatures inside the cabinet may exceed **150°F/65.5°C and cooking oil temperature is in excess of 330°F/166°C.**
- This appliance is for professional use only and is to be operated by qualified personnel. It is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or those lacking experience and knowledge, unless they have been given adequate instruction and/or supervision concerning its operation by a person responsible for their safety. **DO NOT** allow children in the vicinity of this appliance.

**5.1 Computer Cooking Controller**

This section explains the functions, features, and programming/operational procedures for the single-timer *Computer Controller*. The controller has been designed to be user-friendly and many operational instructions and prompts will be shown on the **Upper Display** (blue) to help guide you through each process.



**5.1.1 Keys and Functions**



**Numeric Keypad:** Use to enter fryer settings and to program and/or edit *Menu Item cooking presets*.

**Arrow Keys:** The [2] • [4] • [6] • [8] keys are used as directional arrow keys for manually operating the basket Lifts, scrolling through lists, moving cursor while editing, etc: [2]=UP, [8]=DOWN, [4]=LEFT, [6]=RIGHT. When active as **arrow keys**, they will be illuminated.

**[START]:** This function key is used for various operations: start cook cycle, select items, save settings, exit editing, etc.

**[CLEAR]:** This function key used to cancel cook cycle, exit certain functions, etc.

Continued on Next Page

### 5.1.1 Keys and Functions - continued



**MENU Key:** Action key which is pressed in combination with other keys to access programmed menu item presets. Fifty (50) different programmable Menu Item presets are available.



**EDIT Key:** Action key which is pressed in combination with other keys to enter *edit mode* for changing or entering new *Menu Item Preset* cook settings.



**TEMP Key:** Press this key to set the cooking oil temperature setpoint. When fryer is in *READY* state, Pressing key twice (2x) will display *Actual Oil Temperature* on the *Lower Display* for approximately **20 secs**. **NOTE:** During *PREHEAT*, real-time actual temperature is displayed.



**CLOCK Key:** Press this key to begin manually setting a cooking time (mm:ss).



While in *PREHEAT* state, press this key to start *BOIL-OUT program*. Temp setpoint and time will change to the *BOIL TEMP* and *BOIL OUT TIME* specified in *User Settings (Section 5.1.7, Edit User Settings)*. **Defaults = 200°F & 30 mins.**



Press this key to enter *COOL* mode. An energy-saving feature, places fryer at a lower temperature during inactive periods. Temp setpoint will change to the *COOL TEMP* specified in *User Settings (see Section 5.1.7, Edit User Settings)*. **Default = 275°F.**



**ALARM Key:** Pressing this key silences the controller alarm and acknowledges certain status messages.



**BASKET Key:** Enables arrow keys **[2]-UP & [8]-DOWN** for manually operating the automatic basket lift. Key is *disabled* during *PREHEAT* mode to prevent lowering of product into oil that is not yet at cooking temperature.



**Upper OLED Display:** Displays cook settings, fryer status information, operational instruction prompts, alarm/error messages, etc..



**Lower 7-Segment Display:** Displays status information, cook cycle time countdown, temperature, error codes, etc.

**[HEAT]** indicator illuminates when controller is calling for the heating elements to energize.

**5.1.2 Controller - General Overview**

The following is general operational information only. Detailed procedures and instructions are covered in subsequent sections. During operation, certain instructions and prompts will be shown on the **Upper Display** to help guide user through processes. Additionally, some controller keys and indicator lights will illuminate as a further aid.

- **POWER UP:**

When **Power Switch** is placed in the [ON] position, controller will power up and then sound an alarm. The message **“POWER FAILURE [PRESS START TO PREHEAT]”** is shown on the **Upper Display**. This is normal, intended to prevent fryer from beginning to heat after power interruptions until attended by an operator. Pressing the [START] key silences the alarm and places fryer into **PREHEAT** mode. If the control panel **Selector Switch** is in the [COOK] position, and controller temp setpoint is higher than current actual oil temperature, heating elements will turn ON and cooking oil will begin heating. **DO NOT place Selector Switch in [COOK] position unless vat is filled with cooking oil to the FULL level.**

- **PREHEAT:**

During **PREHEAT**, real-time actual oil temperature will be displayed on the **Lower Display**. When oil reaches the programmed setpoint, an alarm will sound, **Upper Display** will show message **“ALARM - STIR OIL”**. Vigorously stir cooking oil in pot, and press [ALARM] key. Typically, oil temp drops when stirred. Controller delays for 10 seconds and if temperature drops below setpoint during this time, **PREHEAT** continues until temp returns to setpoint. **This process helps to ensure more consistent temperature throughout the total volume of oil, leading to better cooking performance.** Upon reaching setpoint again, alarm sounds again and **Upper Display** shows **“ALARM - SETPOINT REACHED”**. Pressing the [ALARM] key, places fryer into **READY** state.

- **READY STATE:**

Fryer is ready for cooking. The **Lower Display** changes to show current controller temp setpoint and the last used fryer cook settings are shown on the **Upper Display**.

While in **PREHEAT** or **READY** state, fryer settings can be changed by selecting a different preset, see **Section 5.1.4.2, Selecting a Menu Preset**, which changes cook temp, time and item name - **OR** - can be manually changed, see **Section 5.1.3, Setting a Manual Temperature & Cook Time**.

**NOTE: If PASSCODE ENABLE is set to [ON], user cannot manually enter a Time or Temp without the proper password. This lockout feature provides a measure of control over cooking procedures for multiple establishments.**

- **START:**

Current cook settings (preset or manually entered), are shown on the **Upper Display**. To start the cooking cycle press the [START] key. When started, cooking time will begin counting down on the **Lower Display**.





## 5.1.3 Manually Setting a Cook Time & Cooking Temperature

The following explains the process for manually entering cooking time and temperature.

**CAUTION** Before setting Temperature, be sure the *Selector Switch* is in the [OFF] position and that pot is filled with cooking oil.

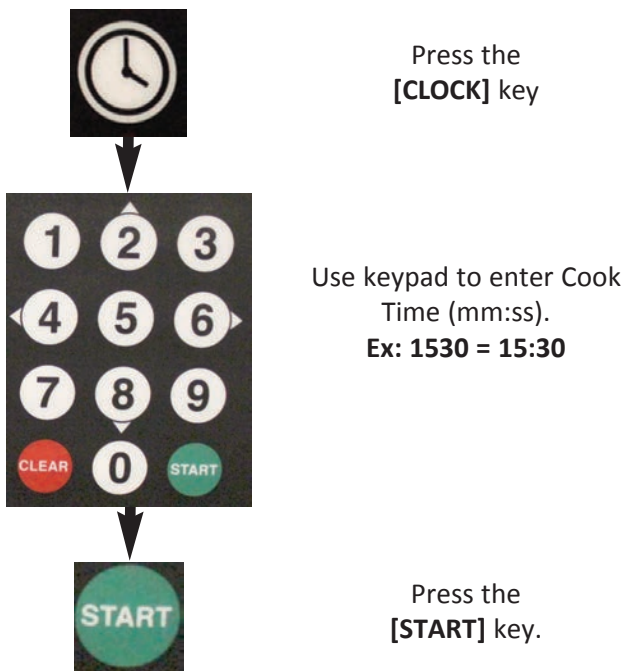
**NOTE:** Manually inputting a cook *Time* and/or *Temperature* causes the *Upper Display* to display [MANUAL] instead of a *Menu Item name*.



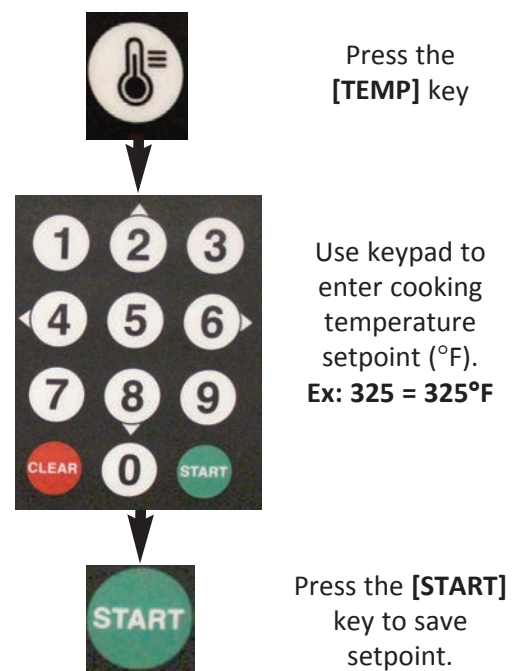
**IMPORTANT!**

If the **PASSCODE** feature is enabled, Time and/or Temperature settings cannot be manually input without entering the required password. User can only choose from the list of programmed *Menu Item Presets*, see **Section 5.1.4, Working with Menus**.

**Set Cook Time: (mm:ss)**



**Set Cook Temperature: (°F)**



**NOTE:** Pressing the [TEMP] key twice (2x) will display the actual oil temperature for 20 seconds

**WARNING** DO NOT place Selector Switch in [COOK] position unless vat is filled to the [FULL] level with cooking oil.

- If actual oil temperature is lower than the entered setpoint, controller enters **PREHEAT** (small red [HEAT] indicator light on controller turns **ON**). Before oil can actually begin to heat, the *Selector Switch on the control panel must be placed in the [COOK] position*. The amber **HEAT** indicator light on the control panel will turn **ON** and oil begins heating.
- If oil temperature is already equal to or greater than the entered setpoint, alarm tone sounds and message **"STIR OIL"** is displayed. Press the [ALARM] key and stir oil. If oil remains at setpoint, alarm sounds again and message **"SETPOINT REACHED"** is displayed. Press [ALARM] key and controller enters **READY** state; fryer is ready for cooking.

While heating, the *real-time actual oil temperature* is shown on the *Lower Display*. After setpoint is reached, display changes to show the *temperature setpoint*. Press [TEMP] key twice to display actual oil temp.

**5.1.4 Working with Menu Item Presets**

Fifty (50) **Menu Item Preset** cook settings are stored in the controller, each including:

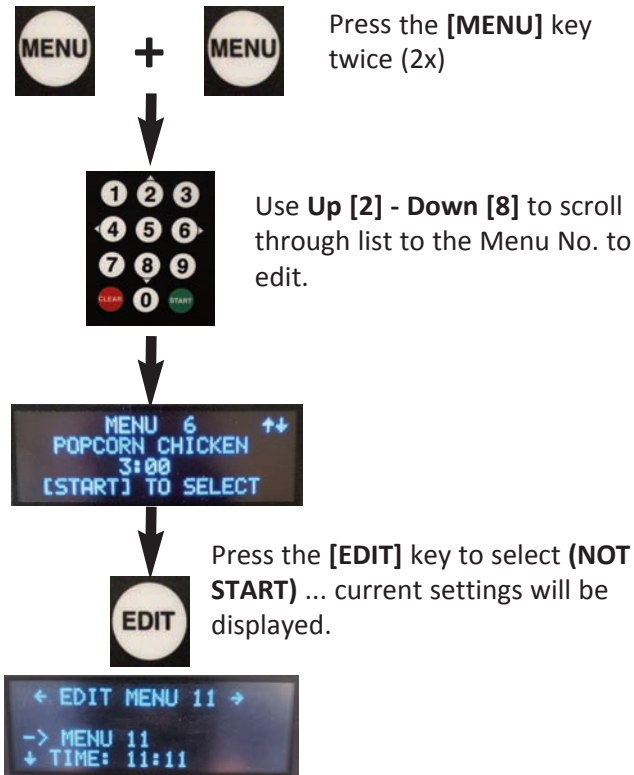
- **Menu #** - Sequential ID number
- **Menu Name** - Name of the food product assigned to the preset.
- **Cooking Time** - Cook time setting for the specific menu item.
- **Cooking Temperature** - Cooking oil temperature setting for the specific menu item.
- **STIR OVERRIDE** - Overrides the controller global **STIR ALARM** setting in **User Settings** for the particular menu item only. **Factory default = [NORMAL]**.
- **FISH FILTER** - To prevent flavor transfer, establishments cooking seafood products can force oil filtering after only **one (1) batch** of seafood is cooked. This setting overrides the global **FORCE FILTER** setting in **User Settings**. **Factory default = [OFF]**. A **SNOOZE** feature can be selected which will allow **two (2) batches** to be cooked before forced filtering.

All **Menu Presets** are factory-programmed with default settings. The first ten (10) are set up with popular menu offerings (names and settings shown in table below). All others contain general settings as shown on the last line of the table. Users can edit any settings as needed to customize for specific applications and menus.

Details for working with **Menu Item Presets** are covered in the following sections.

MENU NO.	MENU NAME	TEMP (F°)	TIME (MM:SS)	STIR OVERRIDE	FISH FILTER
1	BONE-IN-CHICKEN	335°	13:00	NORMAL	OFF
2	TENDERS	335°	7:00	NORMAL	OFF
3	WEDGES	335°	6:00	NORMAL	OFF
4	BONE-IN-WINGS	335°	8:00	NORMAL	OFF
5	BONELESS WINGS	335°	7:00	NORMAL	OFF
6	POPCORN CHICKEN	335°	3:00	NORMAL	OFF
7	LIVERS	335°	4:00	NORMAL	OFF
8	CORNDOGS	335°	10:00	NORMAL	OFF
9	CHEESE STICKS	335°	3:00	NORMAL	OFF
10	FISH	335°	3:00	NORMAL	OFF
<b>11 thru 50</b>	<b>MENU XX</b>	<b>335°</b>	<b>2:00</b>	<b>NORMAL</b>	<b>OFF</b>

## 5.1.4.1 Editing a Menu Preset



Use arrow keys [2] & [8] to scroll the list of settings until the cursor [→] points to the item you wish to edit:

- NAME
- TIME
- TEMP
- STIR OVERRIDE
- FISH FILTER

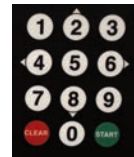
When editing [NAME], [TIME] or [TEMP], press [START] key to select the item.

**NOTE:** When editing [STIR] & [FISH], pressing [START] only toggles through the available settings.

Pressing the [4] key backs-up to a previous preset item or pressing the [6] key advances to a next item to allow editing.

Two different methods can be used to edit the item NAME.

### Editing [NAME] - Method 1: Enter NAME letter by letter.



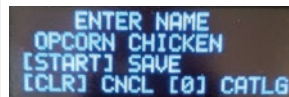
Select the **NAME** as shown on left. A flashing cursor is positioned at 1st letter. Use arrow keys [2] - [8] to scroll through alphabet. Character at cursor changes while scrolling ... stop at desired character. Use arrow key [6] (right) to move cursor to next character and repeat.

When finished editing, press [START] to Save - OR - press [CLEAR] to Cancel and Exit without saving



### Editing [NAME] - Method 2:

Select a Name from catalog of programmed names.



Select **NAME** as shown on left. A flashing cursor is positioned at 1st letter. Press [0] key to open **Catalog** of programmed Names and use arrow keys [2] - [8] to scroll through list. Press [START] to copy choice to the item being edited and return to previous display.

If done, press [START] to Save

- OR -

Press [CLEAR] to Cancel and Exit without saving - OR - Press [0] to re-open catalog.



5.1.4.1 Editing a Menu Item Preset - continued

Edit COOKING TIME:

Scroll to and select TIME for edit as shown on previous page.



Current time setting will be displayed. Use numeric keypad to enter new TIME (mm:ss) NOTE: All digits must be entered, e.g. 1000 = 10:00. While entering time, [CLEAR] key backspaces to erase an incorrect input.



After entering new TIME value press [START] to Save - OR - Press CLEAR to exit without Saving



Edit COOKING TEMPERATURE:

Scroll to and select TEMP for edit as shown on previous page.



Current temp setting will be displayed. Use keypad to enter new cooking TEMP setpoint (°F). 335 = 335°F While entering temp, [CLEAR] key backspaces to erase an incorrect input.



NOTE: TEMP unit can be changed to [°C] in User Settings, see Section 5.1.7



After entering new TEMP value press [START] to Save - OR - Press CLEAR to exit without Saving



Continued on Next Page

### 5.1.4.1 Editing a Menu Item Preset - continued

#### Edit STIR OVERRIDE Setting:

---

Regardless of the global **STIR ALARM** setting in **User Settings (Section 5.1.7)**, a menu item may, or may not, need to be stirred during the cook cycle. **STIR OVERRIDE** setting allows user to override global setting only for a specific Menu Item, if desired. Available settings = **[NORMAL]** • **[SKIP]** • **[FORCE]**.

**[NORMAL]** = stir alarm is issued as specified.

**[SKIP]** = controller **DOES NOT** issue the alarm for this Menu Item, regardless of global setting.

**[FORCE]** = controller **ALWAYS** issues the alarm for this Menu Item, regardless of global setting.

**Factory-default = [NORMAL]**

To edit **STIR OVERRIDE** setting, scroll to and select as described previously ... [→] pointing to **[STIR]**



Press the **[START]** key to toggle between the available options, stop at desired setting.

#### Edit FISH FILTER Setting:

---

To minimize potential for flavor transfer, establishments cooking seafood items may wish to force operators to filter oil after only **one (1) batch** is cooked. When **FISH FILTER** is set to **[ON]**, the unit will enter **FILTER MODE** after completing (1) load of the specific item. If **FORCE FILTER SNOOZE** is set to **[ON]** in **User Settings (Section 5.1.7)**, one (1) additional batch may be cooked before filtering is forced. If **FORCE FILTER=[OFF]** only a filter warning message is displayed on controller; if **FORCE FILTER=[ON]**, the fryer is locked out of continued operation until the filter cycle is completed.

To edit **FISH FILTER** setting, scroll to and select as described previously ... [→] pointing to **[FISH FLTR]**



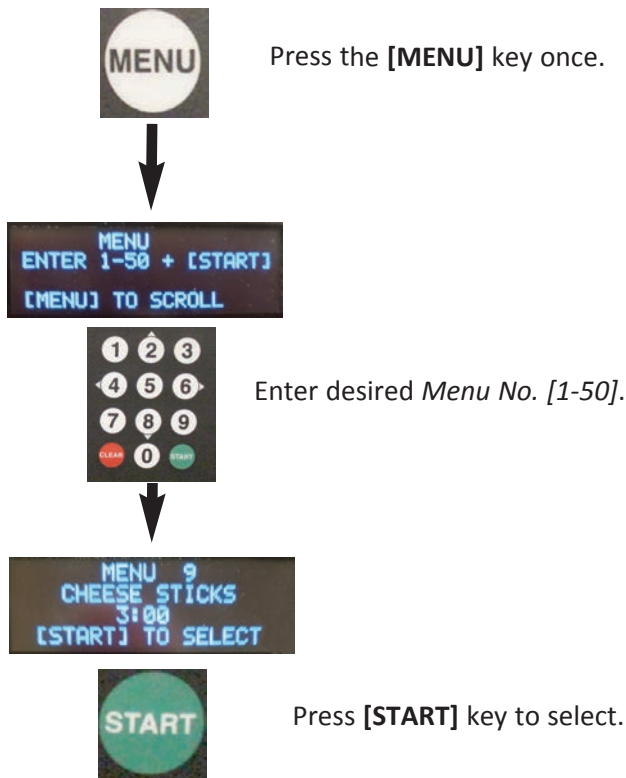
Press the **[START]** key to toggle between **[ON]** & **[OFF]** stop at desired setting.

**5.1.4.2 Selecting a Menu Preset for Cooking**

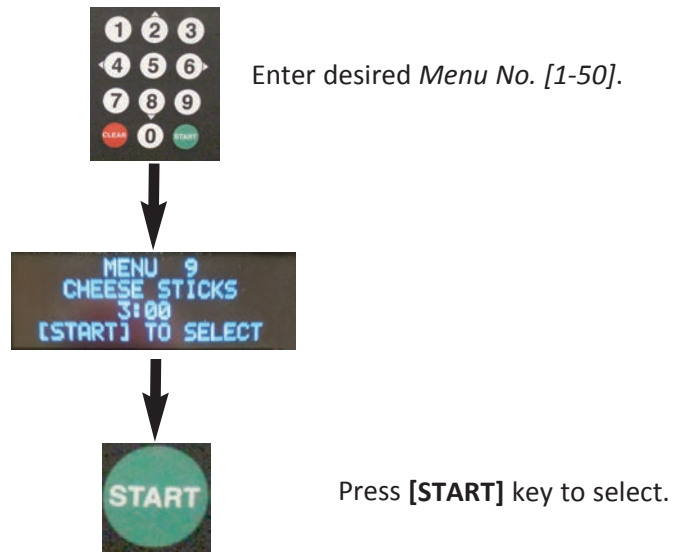
**CAUTION** Before selecting a *menu preset*, be sure that *Selector Switch* on control panel is in the [OFF] position and that pot is filled with cooking oil.

**Direct Entry:** The two (2) methods described below can be used when a desired *Menu No.* is known.

**Method (A)**



**Method (B)**



Selected menu Item information is shown on the *Upper Display*.  
 After selecting the menu preset, place *Selector Switch* in [COOK] position.

If actual oil temperature is lower than the temperature setting of the *menu item preset* selected and the **Selector Switch** is in the [COOK] position, heating elements turn ON and oil begins heating. If the *preset* temperature happens to be lower than actual oil temperature, controller will immediately enter **READY** state and cooking may begin.

**NOTE:**  
*Basket Lift is inoperable while fryer is in PREHEAT mode. Lift is enabled when setpoint is reached and fryer enters READY state.*

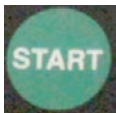
### 5.1.5 Cooking Cycle - General Overview



**COOKING TEMPERATURE • MENU NAME • COOK TIME • STIR OVERRIDE • FISH FILTER** settings are shown on the **Upper Display**. **READY** message indicates that cooking oil is at set temperature and fryer is ready for cooking.



When in **READY** state the **TEMP** setpoint is displayed on the **Lower Display**.



To start the cook cycle, press the **[START]** key once. Basket will automatically lower into the cooking oil and cook **TIME** will begin counting down on the **Lower Display**.

**STIR ALARM:** When active, an audible alarm tone is sounded at a specific time during the cook cycle, signaling the operator to stir the cooking product. Stirring helps to promote even cooking and prevent sticking. This feature must be enabled in **User Settings, Section 5.1.7** and the parameter set. **[STIR ALARM %]** = amount of elapsed time when the alarm sounds. e.g. if **[STIR ALARM %]** = **60**, then during a **10 min.** cook cycle, the alarm will sound after **6 mins.** of time have elapsed.

**Factory-set default:** **[STIR ALARM ENABLE]** = **ON** • **[STIR ALARM %]** = **62**.

The menu item **STIR OVERRIDE** setting overrides the **[STIR ALARM ENABLE]** setting, see **Section 5.1.4.1**.

When cooking cycle time is complete, an alarm will sound and the message **“DONE COOKING”** is displayed and the cook basket is automatically raised from the oil. Pressing the **[ALARM]** key silences the alarm and fryer returns to **READY** state, ready to cook the next load of product.



x 2

To cancel a running cook cycle press the **[CLEAR]** key once, then press it again to cancel **-OR-** press **[4]** to continue the cook cycle.

### 5.1.6 Other Controller Features

#### 5.1.6.1 Manually Operating the Basket Lift



- OR -



Press the **[BASKET]** key once

Use **[2] UP** & **[8] DOWN** keys to raise or lower the Basket Lift

**NOTE:**

- Manual lift operation is disabled while the controller is in **PREHEAT** state. This is a safeguard against attempting to cook product in oil that is not yet at the proper cooking temperature.
- Once activated, lift cannot be actuated again for approximately **20 secs**.

**5.1.6.2 COOL Mode**

**COOL MODE** is an energy-saving feature that changes oil temperature setpoint to a lower value. Places Fryer into an idle standby state during periods of inactivity.



Enter **COOL MODE** by pressing the [COOL] key. The temperature setpoint changes to the **COOL TEMP** setting specified in *User Settings*, see **Section 5.1.7, Edit User Settings**.  
**Factory-set default = 275°F**. The setting can be edited in the range **200°F to 350°F**.



+



To exit **COOL MODE** press the [CLEAR] key, then press [<4] to exit  
 - OR -

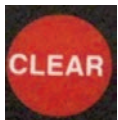
Press [CLEAR] again to continue with **COOL Mode**.

Upon exit, the temperature setpoint will return to the previous active value and fryer will enter **PREHEAT** until temperature is reached.

**5.1.6.3 AUTO-COOL Feature**

When the **AUTO-COOL** feature is turned [ON], fryer automatically enters **COOL MODE** if no cook cycles are started within the amount of time specified by the [AUTOCOOL TIME] setting in *User Settings*, see **Section 5.01.7, Edit User Settings**.

**Factory-default: [AUTOCOOL] = OFF ... [AUTOCOOL TIME] = 30**. **TIME** setting can be edited in range of **1 to 510 mins**.



+



Exit **AUTO-COOL** same as **COOL** ... press the [CLEAR] key, then press [<4] to exit  
 - OR -

Press [CLEAR] again to continue **COOL Mode**.

Upon exit, the temperature setpoint will return to the previous active value and fryer will enter **PREHEAT** mode until temperature is reached.

**5.1.6.4 BOIL OUT Mode**



Pressing the [BOIL] key while controller is in **PREHEAT** state starts **BOIL OUT Mode**. Temperature and time change to the **BOIL TEMP** and **BOIL OUT TIME**, respectively, as specified in *User Settings* (see **Section 5.1.7**).

**Factory-Default Setting:**

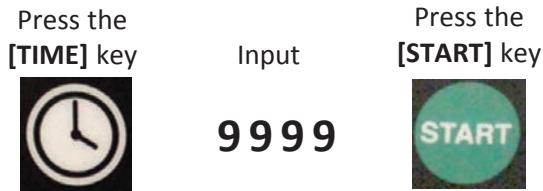
**BOIL TEMP = 200°F** ... can be set in range of **185° to 208°F**.

**BOIL OUT TIME = 30 minutes** ... can be set in range of **1 to 45 mins**.

**IMPORTANT!** Fryer must be properly drained, rinsed and prepared for cooking after the Boil Out cycle. See **Section 6, Cleaning**.

### 5.1.7 User Settings

Settings may be edited by the user ... access the **User Settings** menu is as follows:



To view current settings, use numeric keypad [4] - [6] (left/right) to scroll through and display each setting in the **Upper Display**.



- To edit a Setting when displayed, press the [EDIT] key.
- Use numeric keypad [2] - [8] (up/down) to change the value.
- Press [EDIT] again to save the new setting.



To exit **User Settings** menu, press the [CLEAR] key.

**NOTE:**

The message **“TOO LOW”** or **“TOO HIGH”** is displayed if an entered value is outside the allowable range, which will cause a controller error.

NAME	DESCRIPTION	RANGE	DEFAULT
TEMP SCALE	Temperature scale	°F or °C	°F
FORCE FILTER	When <b>ON</b> , forces user to filter oil after number of cook cycles in <b>FILTER COUNT</b> are complete ... locks-out fryer until filtered.	ON - OFF	<b>ON</b>
FORCE FILTER SNOOZE	When <b>ON</b> , Allows (1) more cook cycle after <b>FILTER COUNT</b> exceeded when <b>FORCE FILTER = ON</b> .	ON -OFF	<b>OFF</b>
FILTER COUNT	Number of cook cycles before user is required to filter.	1 to 20	<b>4</b>
GUARD BAND	Cooking not allowed if oil temperature is outside of the setpoint by amount of guard band	1 to 990	<b>900</b>
MAX SETPOINT	Maximum oil setpoint allowed.	32°F to 350°F	<b>350°</b>
AUTOCOOL	After a specified amount of time, unit will go into <b>COOL</b> mode.	ON - OFF	<b>OFF</b>
AUTOCOOL TIME (MINUTES)	If <b>AUTOCOOL = ON</b> , after fryer is idle for the amount of time specified, the unit enters <b>COOL</b> mode.	1 to 510 minutes	<b>30</b>
AUDIBLE ALARM (SECONDS)	Duration of the audible alarm in seconds, automatically silences after this amount of time..	5 to 120 seconds	<b>10</b>
COOL TEMP	Temperature setting of <b>COOL</b> mode	200°F to 350°F	<b>275°F</b>
BOIL TEMP	Temperature setting for <b>BOIL OUT</b> mode	185°F to 208°F	<b>200°F</b>
FILTER RESET	Temperature that resets fryer from <b>FILTER MODE</b> .	200°F to 325°F	<b>290°F</b>
BOIL OUT TIME	Time (in minutes) for <b>BOIL OUT</b> mode	1 to 45 minutes	<b>30</b>
STIR ALARM ENABLE	If <b>ON</b> , sounds the <b>STIR ALARM</b> during a cook cycle.	ON - OFF	<b>ON</b>
STIR ALARM %	When <b>STIR ALARM = ON</b> , the alarm sounds after this % of cooking cycle has elapsed.	10% to 90%	<b>62%</b>
KEY BEEP ENABLE	If <b>ON</b> , audible sound is generated with each keystroke.	ON - OFF	<b>OFF</b>

**5.1.7 User Settings - continued**

NAME	DESCRIPTION	RANGE	DEFAULT
LANGUAGE	Sets the controller language	English-Spanish-French	English
[0] KEY EXTRA TIME	If enabled, operator can add extra time to cook cycle ( <i>after or during the cycle</i> ) by pressing [0] + the number of minutes to add.	ON - OFF	OFF

**5.1.8 PASSWORD Protection**

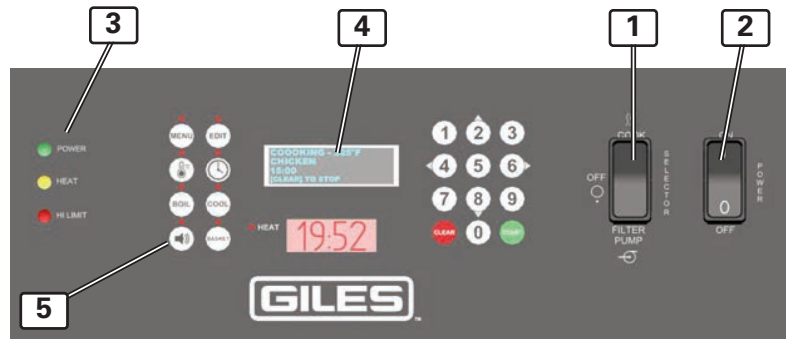
It is possible to enable **PASSWORD** protection for controller functions and settings. Generally, this feature is factory-set to **[OFF]**. When **PASSCODE ENABLE = [ON]** in **Factory Settings**, the controller will prompt user for a password before they can add or edit *Menu Item Presets*, manually enter a temperature setpoint, manually enter or change a cook time, or access the **User Settings Menu**.

If you desire to have Password protection enabled, or have questions concerning this feature, call **Giles Technical Services at 800.554.4537** to request the passcode and instructions as to how to enable this feature.

**5.1.9 Start-up Procedure**

**5.1.9.1 Start-up Non-Ventless, GEF**

1. Be sure that the **Selector Switch** ① is in the center **[OFF]** position.
2. Place **Power Switch** ② in the **[ON]** position and green **POWER** light ③ will illuminate. The computer controller will power-up, perform a memory check and then sound an alarm tone. The message **"POWER FAILURE [PRESS START TO PREHEAT]"** is shown on the **Upper Display** ④. **This is normal** and occurs every time controller is turned **OFF** and back **ON**. This is intended to prevent



fryer from beginning to heat after a power interruption until it is attended by the user. Pressing the **[START]** key silences the alarm and places fryer into **PREHEAT** mode. Fryer settings shown on the **Upper Display** are the last used. The red **HEAT** indicator on controller indicates that it is calling for heat, but until the **Selector Switch** is placed in the **[COOK]** position, heating elements will not be energized.

**⚠ DO NOT** place switch in **[COOK]** position unless pot is filled with cooking oil, see **Section 5.2, Cooking Procedures**.

**NOTE:** Pressing the **[ALARM]** key ⑤ silences alarm tones. Alarm will also silence automatically after a preset time.



# Fryer Operation

## GEF & GEF-VH Series Fryers

### 5.1.9.2 Start-up Ventless, GEF-VH

Be certain that all hood filters are properly installed, and that the access Cover is in place and securely latched before using the appliance.



**NOTE:**

The appliance will **NOT** power-up if the access Cover is missing or ajar. The sides of the cover must seat flush against the hood front and the pin on the right-hand edge must engage the interlock switch inside the hood wall.

1. Ensure that the **Selector Switch** ① is in the center **[OFF]** position.
2. Place **Power Switch** ② in the **[ON]** position, green **POWER** light ③ will illuminate and the hood fan will start. The computer controller will power-up, perform a memory check and then sound an audible alarm tone. The message **“POWER FAILURE [PRESS START TO PREHEAT]”** is shown on the **Upper Display** ④. This is normal and occurs every time controller is



turned **OFF** and back **ON**. Prevents fryer from beginning to heat after a power interruption until attended by the user. Pressing the **[START]** key silences the alarm and places fryer into **PREHEAT** mode. Fryer settings shown on the **Upper Display** are the last used. The red **HEAT** indicator on controller indicates that it is calling for heat, but until the **Selector Switch** is placed in the **[COOK]** position, heating elements will not be energized.

**⚠ DO NOT** place **Selector Switch** in **[COOK]** position unless pot is filled with cooking oil, see **Section 5.2, Cooking Procedures**.

3. The hood fan should be at full speed and the E.A.C. status **[ON]** light ⑤ will turn **ON**. If the **[WASH]** or **[CHECK]** status light also turns **ON**, there could be a problem with the E.A.C. Air Cleaning system. See **Section 8, Troubleshooting**.
4. If an alarm sounds when hood starts and error messages are displayed on controller displays, consult **Section 5.1.10, Controller Errors & Alarms** and resolve issue.

**NOTE:**

Pressing the **[ALARM]** key ⑥ silences alarm tone. Tone also silences automatically after a preset time.



**5.1.10 Controller Errors & Alarms**

Conditions which can cause unsafe operation or damage to the unit (*open valves, low oil level, high temp, hood problems, etc.*) will halt operation, activate an alarm tone and display error codes/messages. Error Codes are shown on the **Lower 7-Segment Display**; error messages and prompts are shown on the **Upper OLED Display**. Generally, heating elements are disabled until error condition has been corrected. Pressing the **[ALARM]** key silences the alarm tone, but does not clear error. Error Codes are shown in the Table below and further details are discussed in the following section.



ERROR CODE	DESCRIPTION ( <i>Upper Display</i> )	PROBLEM
OPEN	DRAIN IS OPEN	Drain valve is open, or not completely closed. Basket will be raised, if down. Close drain to clear error.
----	CHECK OIL LEVEL, ENSURE VAT IS FULL, IF FULL THEN PRESS [START]	This is a secondary error displayed after closing drain clears the OPEN error; confirmation of oil level.
ER03	LOW OIL LEVEL – ENSURE VAT IS FULL (Element/Add Level Differential Warning)	The oil level is below the <b>[ADD]</b> line in the vat. Add oil to the <b>[FULL]</b> level mark & stir. Error will remain in effect until probe temp differential is resolved.
ER06	LOW OIL LEVEL – ENSURE VAT IS FULL – PRESS [START] (Post ER03 Warning)	After an <b>ER03</b> is cleared, this is displayed until user presses <b>[START]</b> to confirm oil level.
ER07	MAX ELEMENT TEMP – PRESS [START] (Post Warning)	Error is displayed after <b>MAX</b> element temperature ( <b>ER19</b> ) has occurred and element has cooled below <b>MAX</b> temperature, .
ER13	OIL PROBE Error	Problem with the <i>variable oil temp probe</i> . <b>Service technician generally required.</b>
ER15	ELEMENT PROBE Error	Problem with <i>element temp probe</i> , attached directly to heating element. <b>Service technician generally required.</b>
ER17	ADD LEVEL PROBE Error	Problem with <i>add level probe</i> at vat <b>[ADD]</b> mark. Fryer without this probe should have <b>ELMT-ADD DIFF ENABLE</b> setting <b>[OFF]</b> in <b>Factory Settings</b> . <b>Probe cannot be bypassed. Service technician generally required.</b>
ER19	MAX ELEMENT TEMP Error	The maximum heating element temperature has been exceeded. <b>This is a safety device; NEVER bypass this Probe.</b>
ER21	BAFFLE FILTER MISSING	<b>Ventless Fryers (VH) Only ...</b> Baffle Filter is missing, or improperly installed.
ER22	CHARCOAL FILTER MISSING	<b>Ventless Fryers (VH) Only ...</b> Charcoal Filter is missing, or improperly installed.
ER23	FILTER CLOGGED	<b>Ventless Fryers (VH) Only ...</b> airflow through hood is below minimum. Charcoal filter is clogged, or other obstructions. Replace filter, remove obstruction.
ER24	EAC CELL DIRTY	<b>Ventless Fryers (VH) Only ...</b> E.A.C. collector cell is dirty, requires cleaning. This error can also have other causes.

### 5.1.10 Controller Errors & Alarms - continued

ERROR CODE	DESCRIPTION ( <i>Upper Display</i> )	PROBLEM
ER25	GUARD BAND EXCEEDED	Actual oil temperature deviates from setpoint by the Guard Band amount. Allow oil to cool, or heat, to within range. Factory default is 900°F ... <b>Error should not occur.</b>
ER37	EEPROM Error	An error occurred while saving settings to the EEPROM. <b>Contact Giles Tech Service (800.554.4537).</b>
ER38	Internal ADC Error	The ADC (Analog-to-Digital Converter) chip has stopped working. MCB1 board must be replaced. <b>Contact Giles Tech Service (800.554.4537).</b>

#### 5.1.10.1 Resolving Controller Errors & Alarms

The following is a summary explanation of various controller errors/alarms and some basic steps which can be taken to correct them and return to normal operation. The inability to resolve an error/alarm by following these steps may indicate a malfunction of some fryer system, or component, that will require the attention of a qualified service technician.

- DRAIN OPEN (Error Code OPEN)** - If the pot drain valve is open (even slightly) while fryer power is **ON**, an alarm sounds, **Lower Display** reads **"OPEN"**, and **Upper Display** reads **"ERROR ALARM - DRAIN IS OPEN"**. If the Basket Lift is down, it will be raised. Heating elements will be disabled as long as the condition exists.

Press the **[ALARM]** key to silence alarm. Completely close the *drain valve* to clear error. When error is cleared, alarm sounds again and **Upper Display** reads **"CHECK OIL LEVEL, ENSURE VAT IS FULL, IF FULL THEN PRESS [START]"**. This is a post-error alarm alerting user to confirm that cooking oil in the pot is at the **[FULL]** level mark. Add oil if needed, then press the **[START]** key to return to **PREHEAT** mode.
- LOW OIL LEVEL (Error Code 03)** - Alarm sounds, **Lower Display** reads **"Er03"**, and **Upper Display** reads **"ERROR ALARM - CHECK OIL LEVEL - ENSURE VAT IS FULL"**. Heating elements are disabled until the condition is corrected. The temperature differential between a probe located at the **[ADD]** level mark and a probe attached to heating element exceeds an acceptable value, indicating low oil level. **Low oil level greatly increases the possibility of fire!** Press **[ALARM]** key to silence alarm and place **Selector Switch** in **[OFF]** position. Allow fryer to adequately cool, then add oil to raise level to the **[FULL]** mark.
- LOW OIL LEVEL Post-error Warning (Error Code 06)** - After **Error 03** clears, a warning alarm occurs. **Lower Display** reads **"Er06"**, and **Upper Display** reads **"CHECK OIL LEVEL - ENSURE VAT IS FULL - PRESS [START]"**. This alarm alerts user to confirm that cooking oil in the pot is at the **[FULL]** level. If no oil is required press **[START]**, otherwise press **[ALARM]** key to silence tone, add oil, then press **[START]** key to enter **PREHEAT** mode.
- MAX. ELEMENT TEMP (Error Code 19)** - Heating element has exceeded the maximum temperature allowed. The alarm sounds, **Lower Display** reads **"Er19"**, and **Upper Display** shows **"ERROR ALARM - MAX ELEMENT TEMPERATURE"**. Heating element is automatically turned **OFF**. It must cool to the acceptable temperature to clear the error. Typical cause of this error is low oil level, which has exposed the heating element. False alarms can occur when preheating **cold** oil at the initial startup of a new day. Vigorously stirring oil during preheat will usually prevent, or clear, a false alarm of this type.

### 5.1.10.1 Resolving Controller Errors & Alarms - continued

- **MAX ELEMENT TEMP Post-error Warning (Error Code 07)** - After **Error 19** is cleared, a warning alarm occurs. **Lower Display** reads “Er07”, and **Upper Display** reads “MAX ELEMENT TEMP - PRESS [START]”. This alarm alerts user that a maximum element temperature error occurred and is now cleared. Press [START] key to enter **PREHEAT** mode. Heating Element will not turn **ON** until [START] is pressed.

---

- **BAFFLE FILTER MISSING (Error Code 21 - ONLY applies to ventless model)** - Alarm sounds, **Lower Display** reads “Er21”, and **Upper Display** reads “ERROR ALARM - BAFFLE FILTER MISSING”. Indicates that Baffle Filter is missing or improperly installed. Heating elements are disabled until the condition is corrected. Install the filter, or adjust its position; error will clear when filter is properly installed. See **Section 7.1.2. & 7.1.3, Baffle Filter Removal & Installation.**

---

- **CHARCOAL FILTER MISSING (Error Code 22 - ONLY applies to ventless model)** - Alarm sounds, **Lower Display** reads “Er22”, and **Upper Display** reads “ERROR ALARM - CHARCOAL FILTER MISSING”. Indicates that Charcoal Filter is missing or improperly installed. Heating elements are disabled until the condition is corrected. Install the filter, or adjust its position; error will clear when filter is properly installed. See **Section 7.1.10, Charcoal Filter Installation.**

---

- **CLOGGED FILTER (Error Code 23 - ONLY applies to ventless model)** - Alarm sounds, **Lower Display** reads “Er23”, and **Upper Display** reads “ERROR ALARM - CLOGGED FILTER”. Indicates that airflow through the hood has dropped below a minimum level. Generally, means that the charcoal filter is clogged, however other airflow restrictions will also cause this alarm. Heating elements are disabled until the condition is corrected. Replace the charcoal filter and/or inspect for any other obstructions; error clears when proper airflow is restored. See **Section 7.1.10 & 7.1.12, Charcoal Filter Installation & Replacement.**

---

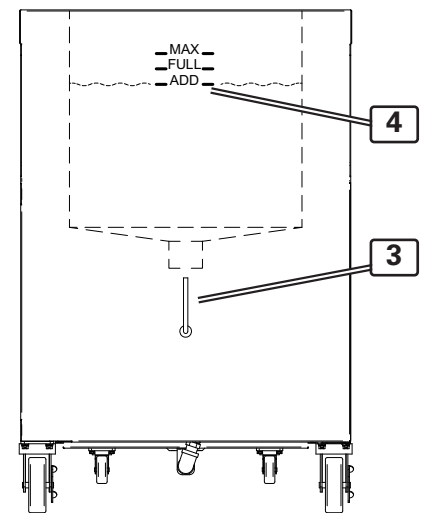
- **E.A.C. DIRTY (Error Code 24 - ONLY applies to ventless model)** - Alarm sounds, **Lower Display** reads “Er24”, and **Upper Display** reads “ERROR ALARM - CLEAN THE EAC”. Indicates that the Electronic Air Cleaner (E.A.C.) collector cell is excessively dirty, missing, improperly installed, damaged, or has stopped functioning. Heating elements are disabled until the condition is corrected. Clean/inspect EAC collector cell; the error will clear when the condition is resolved. See **Section 7.1.6 through 7.1.9, EAC Filter Operation & Cleaning.**

**NOTE: If an error condition cannot be resolved, please contact a factory-authorized service agent, or call 800.554.4537 for Giles Technical Support.**

### 5.2 Cooking Procedures

This section explains cooking procedures for both **GEF & GEF-VH Series Fryers** ... In most cases, these procedures assume starting with a clean, empty fryer with the Basket Lift in the [UP] position.

1. Remove basket from lift carrier and set aside.
2. Be sure that both **Power Switch** ① and **Selector Switch** ② are in the [OFF] position.
3. Be sure the **Drain Valve** ③ is in the fully [CLOSE] position (handle vertical).
4. Place the **Power Switch** ① in the [ON] position. The **POWER** light ⑤ will illuminate. Power-up fryer (and hood) as described in **Section 5.1.9.1, Start-Up Non-VH & Section 5.1.9.2, Start-up VH**.



#### IMPORTANT!

- If alarm sounds during power-up and message "ERROR ALARM - DRAIN IS OPEN" is displayed, verify that the drain valve is tightly closed, press the [ALARM] key and follow controller prompts.

5. Fill the pot with liquid frying shortening to the [ADD] mark ④ only. When cooking temperature is reach, expansion should bring level to near the [FULL] mark.

#### NOTE:

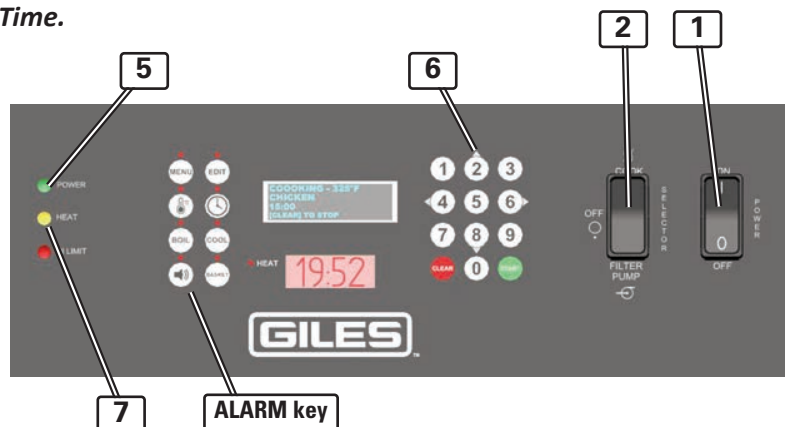
- At power-up, controller retains cook settings from the last load cooked. Skip step #6 if you wish to continue to use these previous settings.

6. Use keypad ⑥ to manually set a temperature and cook time, see **Section 5.1.3, Manually Setting a Temperature & Cook Time**.

-- OR --

Select one of the controller *Menu Item Presets*, see **Section 5.1.4.2, Selecting a Menu Preset**.

7. When set, or selected, controller enters **PREHEAT** mode with current settings being shown on the **Upper Display** and the real-time oil temperature shown on **Lower Display**.
8. Place **Selector Switch** ② in the [COOK] position (press top portion of switch). The **HEAT** light ⑦ will illuminate and the heating elements energize to begin heating oil to temperature setpoint.



Continued on Next Page

5.2 Cooking Procedure - continued

**CAUTION** Cooking oil is extremely HOT! Bodily contact can cause serious injury. Always wear thermal protection, such as oven mitts or gloves.

9. As cooking oil heats, use the provided *Stirring Utensil* to frequently stir oil from the pot bottom up. The stirring action will mix the volume of oil and prevent formation of cool zones, promoting more even heating and help prevent occurrence of a false **HI-LIMIT** alarm while heating cool oil.

10. When oil initially reaches setpoint temperature, heating elements and **HEAT** light ⑦ will turn **OFF**.

11. An alarm sounds and message “**ALARM - STIR OIL**” is displayed on the **Upper Display**.

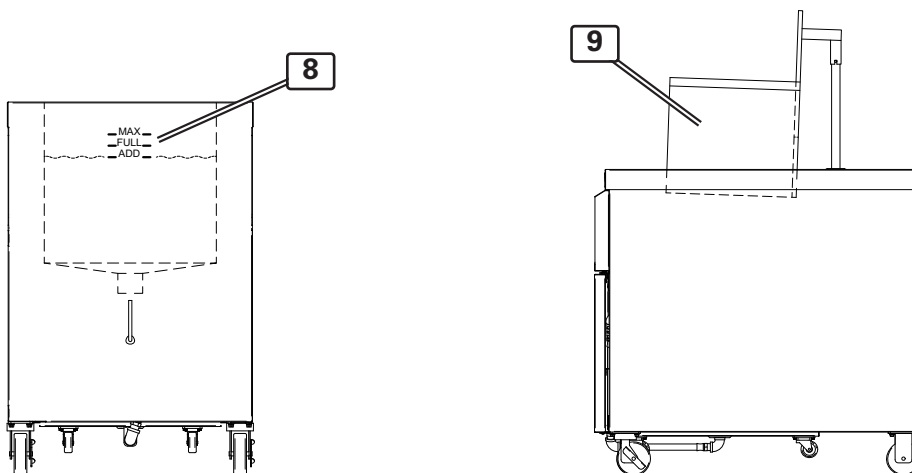


Press the **[ALARM]** key and vigorously stir oil. There will be **10 sec.** delay and if temperature drops below setpoint when stirred, controller remains in **PREHEAT** until setpoint is reached again. A second alarm sounds and message “**ALARM - SETPOINT REACHED**” is displayed. Press **[ALARM]** key and controller enters **READY** state. The temperature displayed in the **Lower Display** changes from real-time actual to setpoint temperature.

*Fryer is now ready for cooking ...*

12. Check cooking oil level. It should now be at, or near, the **[FULL]** Level mark ⑧. Add more oil if needed and stir in. If the **HEAT** light turns **ON** after adding additional oil, continue stirring and wait until it turns **OFF** again before cooking.

13. Place the Cooking Basket ⑨ onto the Basket Lift Carrier.



**WARNING** During cooking operations, oil level **MUST** be maintained above the minimum **[ADD]** level. Failure to do so may cause power to heating elements to shutdown.

Continued on Next Page

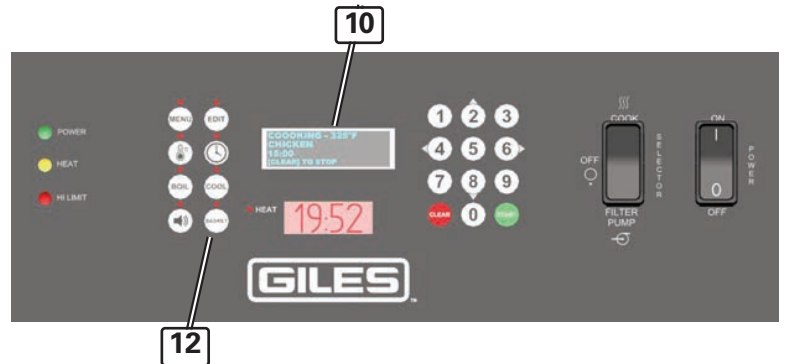
### 5.2 Cooking Procedure - continued

14. Current fryer settings are shown on the **Upper Display** ⑩ along with message “[START] TO COOK”. The “READY” message indicates fryer is ready for cooking.

Different fryer settings can be input by following steps in **Section 5.1.3** or **Section 5.1.4.2**

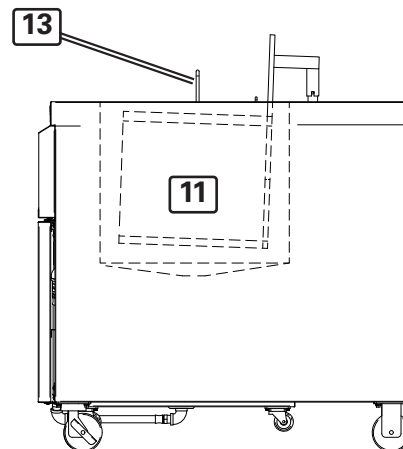
**Recommended full fryer loads for bone-in, 8-way cut chicken are as follows:**

- GEF-400: 14 lbs.
- GEF-560: 19 lbs.
- GEF-720: 24 lbs.



**CAUTION** If basket is lowered before loading, use extreme caution when placing product into HOT oil; skin contact, or splash, can cause serious injury.

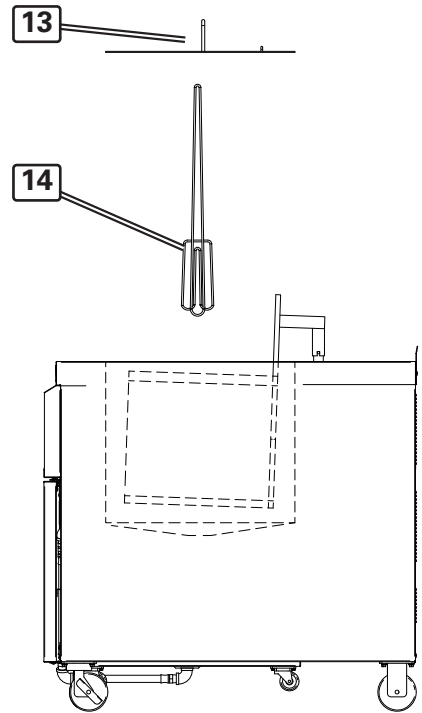
15. Uncooked product may be placed in the basket ⑪ either before or after it is lowered into hot cooking oil.
- To manually lower basket before loading, press [BASKET] key ⑫, then press [8] on keypad to lower. **NOTE: Basket lift will not operate unless controller indicates READY.**
  - OR —
  - Load basket while in [UP] position.
16. Press [START] key to begin cook cycle. If up, basket automatically lowers and cooking timer begins countdown, which is shown on **Lower Display**. **Controller must be in READY state before cooking cycle will begin.**
17. Place **Basket Cover** ⑬ on top of pot.





**5.2 Cooking Procedure - continued**

**NOTE:**  
**Step #18** applies only if User Setting [STIR ALARM ENABLE] = ON and the Menu Preset [STIR OVERRIDE] = NORMAL for item being cooked.  
 -- OR --  
 [STIR ALARM ENABLE] = OFF and [STIR OVERRIDE] = FORCE.  
 If these settings are not in effect, **NO** alarm will sound.  
 Regardless of setting, It is recommended that product be stirred at some point during the last half of the cook cycle to help promote even cooking and prevent pieces from sticking together.



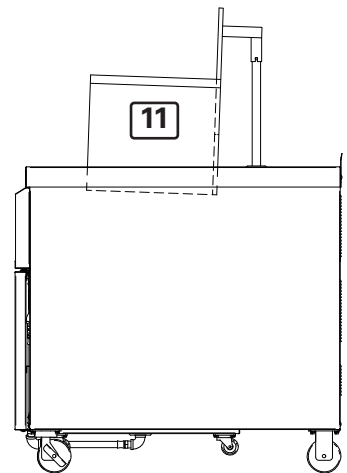
18. **STIR ALARM** sounds after a preset amount of programmed cook time has elapsed. The **Upper Display** reads “ALARM - STIR” Press the [ALARM] key to silence alarm. **Wear oven mitts, or other thermal protection**, remove the **Basket Cover** (13) and stir/agitate the cooking product with the provided **Stirring Utensil** (14) to separate pieces. Replace the Basket Cover.

19. At the end of the cooking cycle, basket (11) containing cooked product will automatically be raised from the oil. An alarm sounds and message “DONE COOKING” is displayed on **Upper Display**. Press the [ALARM] key to silence alarm and fryer returns to **READY** state for next load.

20. Allow product to adequately drain. **Wear oven mitts, or other thermal protection**; remove basket cover and hang it onto the basket lift carrier.

20. Lift basket off carrier and dump cooked product into an appropriate food pan container, or dump station.

- 21. a.) To cook another load - return to **Step #12** of this procedure.
- b.) To place fryer into standby **COOL Mode** - see **Section 5.1.6.2, Cool Mode**.
- c.) To shutdown Fryer - see **Section 5.5, Normal Shutdown**.



**IMPORTANT!**  
**In attempt to promote oil drainage or to dislodge cooking residue, DO NOT forcefully strike basket (full or empty) on the fry cabinet edge, pot edge, basket carrier or other hard surfaces. This may damage the basket or fryer, and such damage is not covered by the factory warranty.**

### 5.3 Filtering Used Cooking Oil

This section explains use of the on-board *Oil Filtration System* for reconditioning used cooking oil. The system circulates oil through filter media in the *Filter Pan* and back to the fryer pot. Routinely performing this procedure can increase useful life of cooking oil by as much as 50%.

GEF & GEF-VH fryers are equipped with a configurable **FORCE FILTER** feature, which can be set to force operating personnel to perform the oil filtering process after a prescribed number of cooking cycles have been completed. This feature can be configured in **User Settings**, see **Section 5.1.7**:

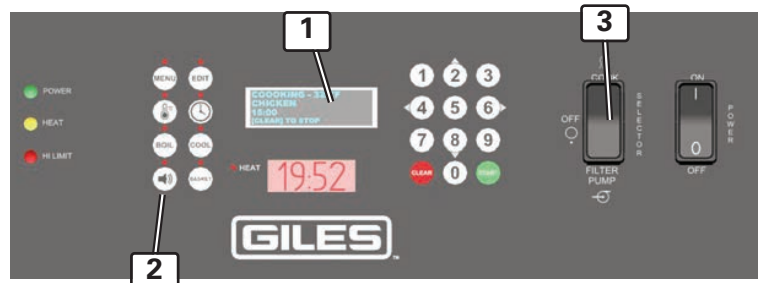
- **FORCE FILTER** - [ON] or [OFF] • **Factory default = [ON]**.
  - [ON] = After completing a set number of cook cycles (**FILTER COUNT**), alarm sounds and message “**ALARM - MUST FILTER OIL**” is displayed on **Upper Display** screen. Pressing the [ALARM] key silences alarm and fryer enters **FILTER MODE**. Unit will be disabled from continued operation until the filtering process is properly completed, as described.
  - [OFF] = After completing a set number of cook cycles (**FILTER COUNT**), alarm sounds and message “**ALARM - FILTER OIL**” is displayed on **Upper Display** screen. Pressing the [ALARM] key silences alarm and fryer returns to **READY** state ... fryer is not disabled. The unit can continue being used, however the alarm sounds and the prompt is displayed after every subsequent cook cycle until filtering is performed.
- **FILTER COUNT** - 1 to 20 • **Factory default = 4**.
  - The number of cook cycles that can be performed before fryer enters **FILTER MODE**.
- **FORCE FILTER SNOOZE** - [ON] or [OFF] • **Factory default = [OFF]**.
  - Effective only when **FORCE FILTER** is [ON].
  - [ON] = Allows operator to cook **one (1) additional load of product** after **FILTER COUNT** has been reached, before unit enters **FILTER MODE** and is disabled.
  - [OFF] = **No** additional cook cycle is allowed.

In addition to global **FORCE FILTER**, each **Menu Item Preset** contains a **FISH FILTER** setting which, when set to [ON], overrides the global setting and enters **FILTER MODE** after cooking **only (1) batch** of the particular **Menu Item**. This additional feature is typically used for seafood items in attempt to minimize possibility of flavor transfer. See **Section 5.1.4.1, Editing a Menu Item Preset** for more detail.

#### CAUTION

DO NOT attempt to filter cold, congealed oil. The filter pump can clog and be damaged. Oil should be at a minimum of 200°F (93°C) before attempting to pump.

1. After cooking the preset number of loads specified by [FILTER COUNT] the alarm sounds.
- 2a. If **FORCE FILTER = OFF**, display ① reads “**ALARM - FILTER OIL**”, press [ALARM] key ② to continue. **To alert operator that oil needs filtering, this alarm reminder will occur after each subsequent load cooked, until oil is filtered.**
- 2b. If **FORCE FILTER = ON**, display ① reads “**ALARM - MUST FILTER OIL**”, press [ALARM] key ②. Fryer enters **FILTER MODE** and is **disabled for continued operation** until oil filtering is performed.
3. Place **Selector Switch** ③ in [OFF] position. **IMPORTANT! The Power Switch must remain in [ON] position during the filtering process.**





**5.3 Filtering Used Cooking Oil - continued**

**CAUTION** Always wear thermal protection, such as gloves or oven mitts, while performing the filtering process. Fryer parts inside cabinet will be very HOT!

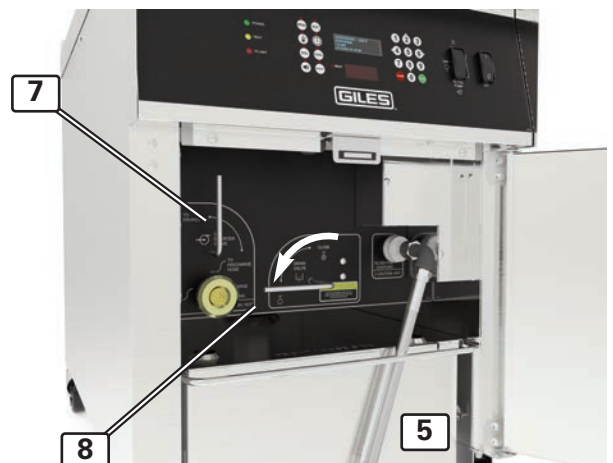
4. Open the cabinet door, disconnect the **Filter Pan Hose** ④ (push white slip-ring in, and pull hose from connector) ... remove **Filter Pan** ⑤ from unit.
5. Remove **Pan Cover** ⑥ and check that filter media (typically, 1 sheet of filter paper) is in place and that residue from previous filter cycles has been cleaned from the surface. Ensure that **Hold-down Frame** is properly locked in place.
6. Evenly distribute approximately **5 ozs** of a suitable **filter aid** product over the media surface. Use of a quality filter aid is essential for removing soluble impurities and reconditioning the oil. **Portion packed Filter Powder is available from Giles dealers or distributors ... Item #72004.**
7. Replace **Pan Cover** and reposition assembled **Filter Pan** under the unit; reconnect **Filter Pan Hose** ④ (push in white slip-ring while inserting brass fitting into connector). **Ensure that hose fit is tight and secure.**



**DANGER** The next steps require that cooking oil be drained into the filter pan, thus exposing the heating elements. Fryer is equipped with safety interlocks which disable heating elements anytime the drain valve is opened. As further safeguard to reduce risk of oil fire, always place Selector Switch in the [OFF] position prior to draining. NEVER CONSIDER THE DRAIN VALVE AS AN "ON/OFF SWITCH".

8. Ensure **Selector Switch** is in the [OFF] position ... **Power Switch** must remain [ON]. Place the **Oil Diverter Valve** ⑦ in the [TO FRYPOT], vertical position. Slowly turn the **Drain Valve Handle** ⑧ to the [OPEN], horizontal position. Allow used oil to completely drain into **Filter Pan** ⑤.

**NOTE:**  
 Be sure filter pan cover is in place while draining to contain any oil splash and splatter.  
 If pot does not readily drain, use the provided **Kettle Drain Brush** to break up crumbs or debris that might be blocking the drain opening. **Be careful not to push brush so far down as to puncture filter media in the Filter Pan. Doing so could allow excessive debris to enter the filter pump, potentially clogging and damaging it.**



Continued on Next Page

### 5.3 Filtering Used Cooking Oil - continued

9. When pot has *completely drained* into the **filter pan**, place the **Selector Switch** ⑨ in the **[FILTER PUMP]** position.

10. Pump starts, oil is drawn through the filter media (and filter aid), then flows back into the pot. **Leave drain valve open and allow oil to continually recirculate to act as a “crumb wash”, flushing residue into the filter pan.** During this time use the provided heat-resistant **Brushes** to scrub residue from pot surfaces, as well as heating elements. Allow recirculating oil to flush the pot.

11. After approx. **5 mins**, return **Drain Valve Handle** ⑩ to the **[CLOSE]** position (vertical) and allow pump to run until the pot refills with filtered, reconditioned, oil.

12. When oil has been completely pumped back to pot, place the **Selector Switch** ⑪ in the **[OFF]** position (centered) to stop pump.

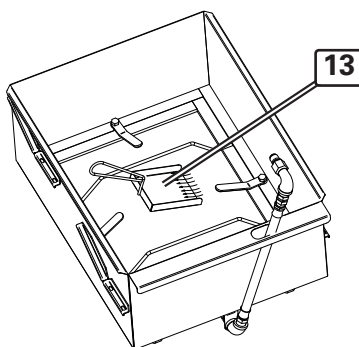
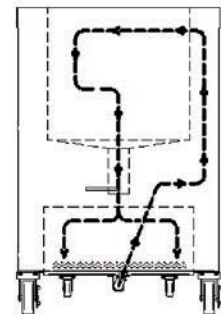
13. Be sure oil level is at the **[FULL]** mark, add if needed.

14. **Wearing thermal hand protection**, disconnect **Filter Pan Hose** ⑫, remove the **filter pan** and lift off **cover**.

15. Using the provided **Crumb Scoop** ⑬, remove filter sediment from the surface of filter media and discard. *Unless there are obvious holes or tearing, it is not necessary to replace the filter media after every filtering cycle.*

**IMPORTANT! At a minimum, filter pan should be thoroughly cleaned and media refreshed DAILY, see Section 6.2, Cleaning Filter Pan & Replacing Filter Media.**

16. Replace **cover** and reinstall **filter pan** in fryer cabinet.



**5.3 Filtering Used Cooking Oil - continued**

17. To continue cooking, refer to *Step #6, Section 5.2, Cooking Procedure*.

To discontinue cooking, see *Section 5.5, Normal Shutdown*.

**IMPORTANT!**

When **FORCE FILTER** is [ON], the fryer will not exit **FILTER MODE** and return to normal operation unless the controller detects, 1). opening of the drain valve, and 2). an oil temperature that is less than the [FILTER RESET] temperature parameter set in *User Settings*. Generally, oil cools sufficiently while filtering to reset the controller ... *Default = 290°F*.

For controller to reset properly from **FILTER MODE**, the **Power Switch** must remain [ON] throughout the entire filter process. If switch is turned [OFF], controller does not sense drain opening or oil temperature and will not reset.

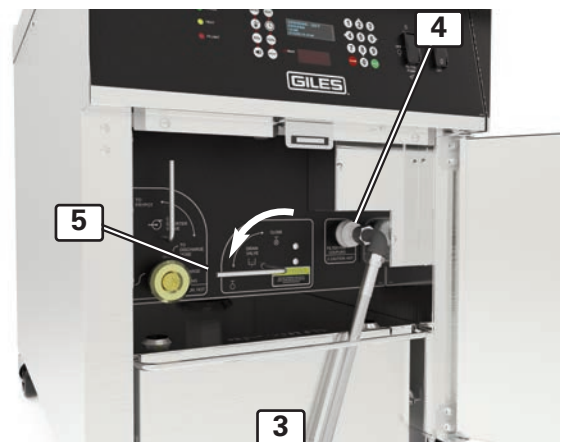
**5.4 Removing Waste Cooking Oil from Fryer**

This section explains the procedure for removal and disposal of waste cooking oil from fryer. To maintain the quality of cooked foods, oil should be changed every **7 to 10 days**, depending on filtering practices, types of food, and quantities regularly cooked. Oil removal must also precede performance of **Boil-Out** procedures.

In this section a **Giles Oil Caddy (not provided)** is referenced as waste oil handling equipment.

**CAUTION** DO NOT attempt to pump cold, congealed oil. The filter pump can clog and be damaged. Oil should be at a minimum of 200°F (93°C) before pumping.

1. If cooking oil is cold, *preheat to 200°F (93°C)*.
2. Be sure the **Power Switch** ① and **Selector Switch** ② are both in the [OFF] position.
3. Open cabinet and ensure **Filter Pan** ③, with filter media, is in place and the **Filter Pan Hose** ④ is properly connected to fryer.
4. Slowly turn **Drain Valve Handle** ⑤ to the [OPEN] position (horizontal) and allow pot to completely drain.



Continued on Next Page



**5.4 Removing Used Waste Cooking Oil from Fryer - continued**

- 10. After waste oil is removed from *filter pan*, place the *Selector Switch* (12) and *Power Switch* (13) in the [OFF] position.
- 11. Return *Oil Diverter Valve handle* (14) to the [TO FRYPOT] position (vertical).

14. **Wear thermal protection!** Remove *Discharge Hose* from the *Discharge Hose Coupling* (15) and drain any oil remaining in it into the disposal container.

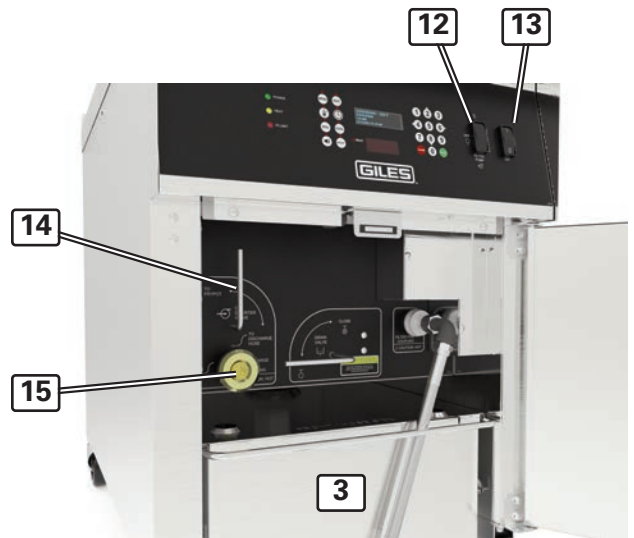
15. Allow the *Filter Pan* to sufficiently cool. then remove from unit. Disassemble and clean thoroughly, as described in **Section 6.2**.

16. After removal of waste oil, a **Boil-Out Procedure** should be performed promptly. See **Section 6.1, Boil-Out Procedure**. **DO NOT** allow oil residue to remain in the pot any extended period of time. It will become very difficult to clean and eventually can lead to an undesirable build-up that can negatively impact fryer performance and food quality.

◊ If **Boil-Out** must be postponed, at a minimum, use absorbent paper wipes to clean as much waste oil residue as possible from the pot surfaces and heating elements, clean the *Filter Pan* and refill pot with fresh oil. Restart fryer as described in **Section 5.2, Cooking Procedures**.

17. To perform a **Boil Out**, see **Section 6.1, Boil Out Procedure**.

To shutdown fryer, refer to **Section 5.5, Normal Shut-Down**.





### 5.5 Normal Shut-Down

1. Place **Selector Switch** ① in the [OFF] position.
2. Place **Power Switch** ② in the [OFF] position, confirm **POWER** light ③ turns OFF.
3. To completely remove power from the appliance, turn **OFF** circuit breaker in main electrical panel providing power to the unit.



### 5.6 Emergency Shut-Down

In case of emergency, shutdown power to the unit by turning **OFF** the facility main circuit breakers and/or comply with your organization's standard emergency procedures.

## 6. Cleaning

This section describes procedures for cleaning and maintaining *GEF & GEF-VH Series Fryers*, which are necessary to keep them in good operating condition. **General cleaning of the appliance should be performed daily** and other activities should be performed as described by the following.

**⚠ DANGER** *DO NOT* wash down the interior or exterior of fryer with water from a spray hose, or any pressure-type washer.

Failure to comply with DANGER notices will result in death or serious injury, equipment or property damage, and void the warranty.

### 6.1 Boil-Out Procedure (Cleaning the Fryer Pot)

The following explains a **Boil-Out Procedure** for cleaning the fryer pot and heating elements. This procedure must be performed before cooking with the new fryer, and should be performed promptly before refilling fryer with fresh cooking oil after old is removed and discarded.

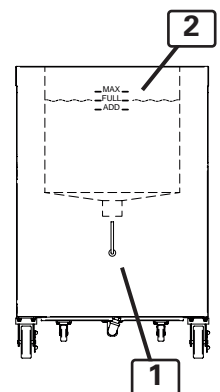
*For proper maintenance and to ensure satisfactory operation and food quality, the procedure should be performed every 7 to 10 days, however, exact timing of oil replacement is highly dependent on many factors. Oil testing kits, which can help accurately determine oil condition and when replacement is needed, are available from most restaurant supply providers.*

**⚠ CAUTION**

- The **Boil-Out** process does not require a rolling boil ... nevertheless, **DO NOT** leave fryer unattended during the procedure. It should be carefully monitored for accidental overflow, which can result in serious equipment damage.
- The boil-out solution and fryer will become very HOT ... always wear thermal hand protection when draining and cleaning, as well as, other personal protective equipment, such as face-shield and latex apron.
- When using *fryer degreaser/cleaner products*, closely follow the manufacturer’s instructions for use. Many available products may contain chemicals, which require special precautions. If used improperly, equipment damage and/or personal injury could result.

1. Remove waste cooking oil from the fryer as described in *Section 5.4, Removing Waste Cooking Oil*.
2. Confirm that the **Drain Valve Handle** ① is in the fully [CLOSE] position.
3. Ensure **Selector Switch** is in the [OFF] position.
4. Use absorbent wipes to clean as much waste oil residue as possible from pot and heating elements. Begin filling pot with clean ambient water.
5. Use a reputable **fryer cleaning** product and carefully follow the manufacturer’s usage directions. Add the recommended amount to pot while filling, stir to mix, and fill to the [FULL] level mark ②.

**Fryer Boil Out** cleaner is available through *Giles equipment dealers and distributors* ... Item number: #72003-1, 8-lb Jar or #72003, Case of 4 Jars.



### 6.1 Boil-Out Procedure (Cleaning the Fryer Pot) - continued

5. Place the **Power Switch** ③ in the [ON] position.
6. Place the **Selector Switch** ④ in [COOK] position.
7. After controller powers-up and the alarm sounds, press [START] key to enter **PREHEAT**; amber **HEAT** light on control panel turns **ON**, solution begins heating. Note **Upper Display** reads "**PRESS [BOIL] - GO TO BOIL-OUT**". Press the [BOIL] key ⑤ to place fryer into **BOIL OUT mode**. Temp setting changes to **200°F (93°C)** and time begins countdown from **30 mins**. Allow the boil out cycle to run completely. *These values can be changed in User Settings, Section 5.1.7.*



8. When boil out cycle time expires, a "**DONE COOKING**" alarm sounds; place both **Selector Switch** ④ and **Power Switch** ③ in the [OFF] position.
9. Disconnect and remove **Filter Pan** from fryer.

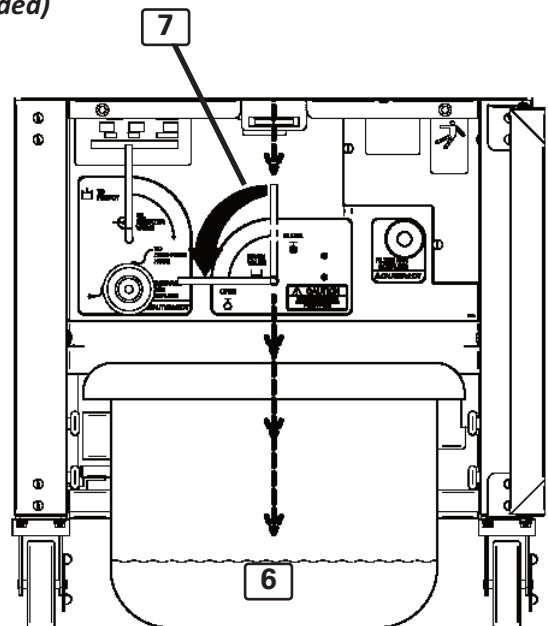
**NOTE:**  
As a safeguard, when the boil out cycle ends, the controller temperature setpoint automatically changes to 50°F. Before cooking activities can resume, a *menu item preset* must be re-selected, or temperature setpoint must be manually re-entered.

**IMPORTANT!!**  
***DO NOT drain boil-out solution into the filter pan or run through filter pump!*** It is corrosive and can cause damage to components. Equipment failures and/or malfunctions caused in this manner, are not be covered by the factory warranty

10. Position a suitable **heat resistant catch container** ⑥ (*not provided*) beneath the fryer drain.

**CAUTION** The container used for this step should be heat resistant up to 300°F (148°C). Plastic is generally not safe, as it may soften and break open. A leak-proof metal container should be used. Failure to comply with this caution may result in personal injury.  
If a floor drain is available in a suitable nearby location, slowly draining solution onto floor and squeegeeing the liquid into drain is an acceptable alternative (*may require a helper*).

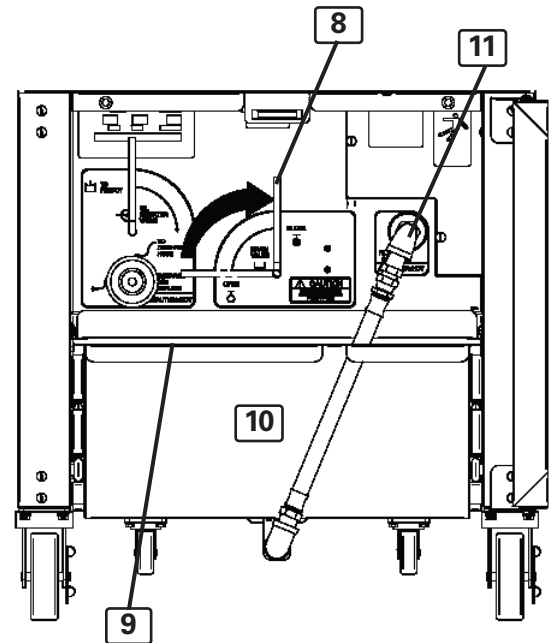
11. Slowly turn the **Drain Valve Handle** ⑦ to the [OPEN] horizontal position and drain boil-out solution from pot. If using catch container, carefully monitor and empty as needed. As solution drains, clean heating elements and pot surfaces, by scrubbing with the provided brushes.
12. Rinse and flush pot thoroughly with clean hot water. ***Empty catch container as often as needed or continue to squeegee to floor drain.***





**6.1 Boil-Out Procedure (Cleaning the Fryer Pot) - continued**

- 13. Dry pot with clean, dry, sanitized towels. Be sure pot surfaces and heating elements are completely dry before refilling with fresh cooking oil.
- 14. Slowly turn the **Drain Valve Handle** ⑧ to the [CLOSE] vertical position.
- 15. Clean **filter pan**, replace **filter media** and re-assembled; refer to **Section 6.2, Cleaning Filter Pan & Replacing Filter Media**.
- 16. Place **Pan Cover** ⑨ on **Filter Pan** ⑩, reposition assembled pan under fryer and connect **Filter Pan Hose** ⑪ at the quick connect fitting..
- 17. To resume cooking, refill pot with fresh liquid frying shortening and restart fryer as described in **Section 5.2, Cooking Procedures**.



To shutdown, follow prescribed standard procedures; refer to **Section 5.5, Normal Shutdown**.

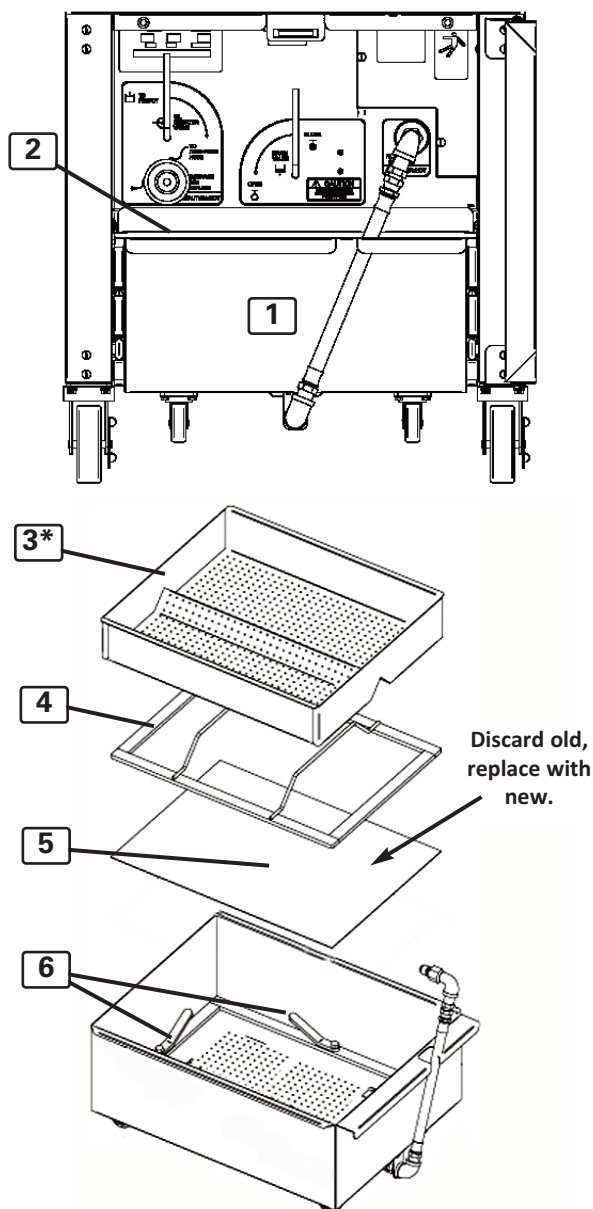
### 6.2 Cleaning Filter Pan & Replacing Filter Media

This section describes the procedure for cleaning the **filter pan** and replacing **filter media**. Perform this after each **Boil-Out Procedure (Section 6.1)**, as well as part of a **daily cleaning routine**.

**GILES recommends using a non-toxic, non-detergent, biodegradable degreaser cleaner, such as SIMPLE GREEN® Crystal Foaming Spray Cleaner/Degreaser along with hot water, to clean the filter pan and components.**

**CAUTION** Wear thermal hand protection as safeguard from hot parts.

1. Shutdown fryer using **Normal Shut-Down**, see **Section 5.5**.
2. Remove **Filter Pan (1)** from fryer and lift off **Pan Cover (2)**. Clean and dry cover thoroughly.
4. If equipped, remove the **Crumb Screen\* (3)**, clean and dry it thoroughly.
5. Using the metal **Crumb Scoop** provided with the unit, remove accumulated filter residue from the surface of the media **(5)**, especially around the edge of the **Hold-Down Frame (4)**.
6. Turn locking **Levers (6)** to disengage the **hold-down frame** from pan bottom. Remove frame, clean and dry thoroughly.
8. Grasp edge of **soiled sheet of filter paper (5)** and carefully roll it up, taking care not to allow filter debris to fall through perforated screen in the pan bottom, and discard.
9. Clean **filter pan**, rinse thoroughly and dry completely. Be certain to drain all water from the filter pan hoses.
10. Reassemble **filter pan, using one (1) fresh sheet of filter paper (proper size 15-1/2" x 21-3/8")**. Close all locking levers, be sure they securely engage **hold-down frame**.
11. Replace **pan cover** and place assembled **filter pan** under fryer. Reconnect hose at quick-disconnect fitting.



\* Purchased separately, not provided

#### IMPORTANT!

The **filter pan** must be cleaned at least **daily**, as previously described. Doing so will help keep the on-board oil filtration system operating at peak performance.



## 7. Ventless Hood

The following section applies **ONLY** to **GEF-VH Ventless Hood Fryers** and explains operation, maintenance and service procedures for the **ventless hood system**. The integral hood is a recirculating system that captures and removes grease-laden cooking vapors generated by the fryer. Air is cleaned and filtered before being exhausted back into the room. The system does not require ducting to the outside, however, to ensure satisfactory performance, the installation site must comply with certain requirements, as specified in **GILES Hood Approval Document (HAL)**.

**IMPORTANT!** The appliance will **NOT** power-up if the filter Access Cover is missing, or ajar. The sides of the cover must seat flush against the hood front and the pin on the right-hand edge must engage the interlock switch inside the hood wall. The fryer will **NOT** heat unless **ALL** hood filters in place.

### 7.1 Filters



This section explains each **filter** of the **ventless hood system** and describes removal, installation, cleaning, and the alarm conditions that can occur if not properly maintained. Maintenance and cleaning must be performed as prescribed to keep the ventless hood operating at peak performance for removal of grease-laden vapor.

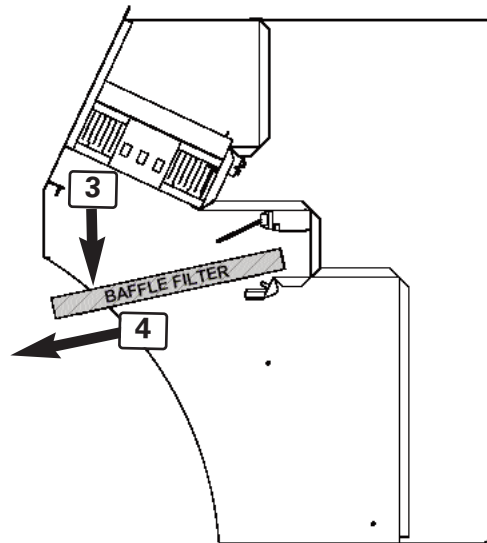
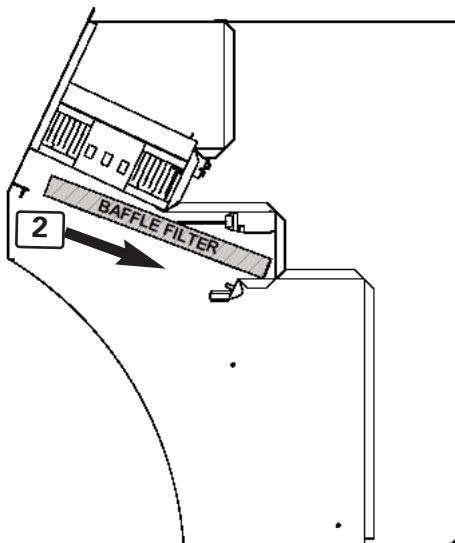
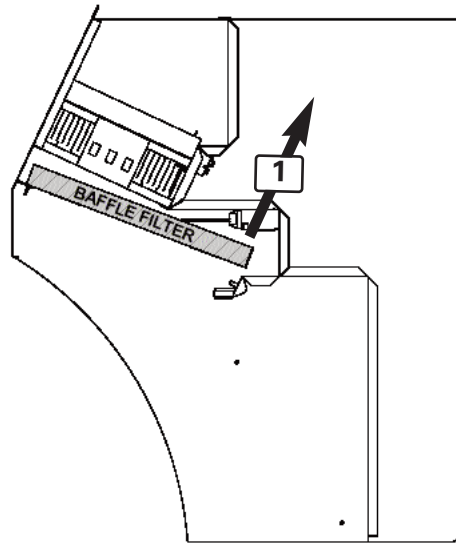
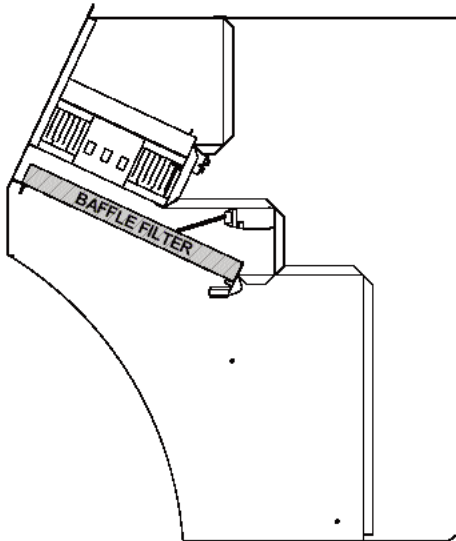
#### 7.1.1 Ventless Hood Filter Table

Filter	When to Clean or Replace	How to Remove	How to Clean	How to install
Baffle Filter	Clean Daily	Section 7.1.2	Section 7.1.4	Section 7.1.3
E.A.C. Filter Cell	Clean Daily	Section 7.1.5	Section 7.1.9	Section 7.1.6
Charcoal Filter	Replace approx. every 30-40 days <b>P/N 30248</b>	Section 7.1.10	<b>Cannot be cleaned REPLACE ONLY</b>	Section 7.1.11

- **BAFFLE FILTER:** First stage of the air cleaning process. Entraps and collects larger grease-laden particulate generated while cooking. Condensate drains into a collection trough and is directed to a drip cup beneath the filter. **Filter is generally dishwasher safe.**
- **ELECTRONIC AIR CLEANER [E.A.C.] COLLECTOR CELL:** Second stage of the air cleaning process. Contains **fine ionizer wires** and a **bank of thin metal collection fins**. System negatively charges grease particulate in the air stream, allowing it to be electrostatically captured and collected on the fins. The cell must be cleaned **EVERY DAY** with a non-caustic degreasing cleaner. Fryer is equipped with a **Cleaning Timer** device that reminds user to clean the cell and will shutdown fryer and disable it from continued operation until the cell is cleaned.
- **CHARCOAL FILTER:** Third stage of the air cleaning process. The activated carbon filter **helps to control cooking aromas** in the exhausted air. The filter is a consumable item (single use) that **MUST** be replaced approximately every **30 to 40 days**, depending on cooking activities. **The filter CANNOT be cleaned and reused.**

7.1.2 Baffle Filter Removal

	<b>WARNING</b>	<i>The Baffle Filter has sharp exposed edges, which may cause cuts. Use due caution when handling and cleaning. Heavy duty rubber gloves are advised.</i>
	Sharp edges Watch your fingers	



- ① Lift rear edge of filter enough to clear the edge of **rear support channel**.
- ② Slide filter toward the back of the hood, allowing front edge to slide free of **front support ledge**.
- ③ Drop front edge down to clear **Front Header Panel**.
- ④ Remove filter from hood.

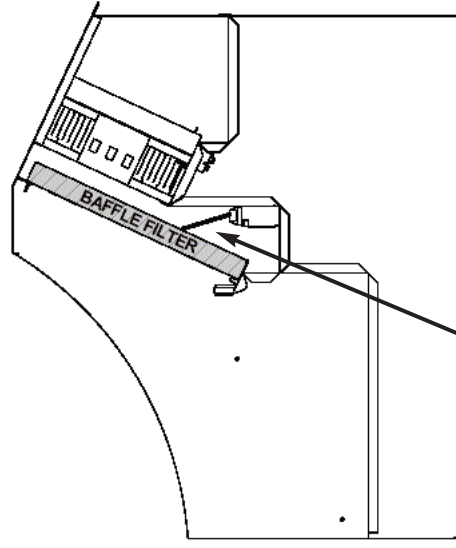
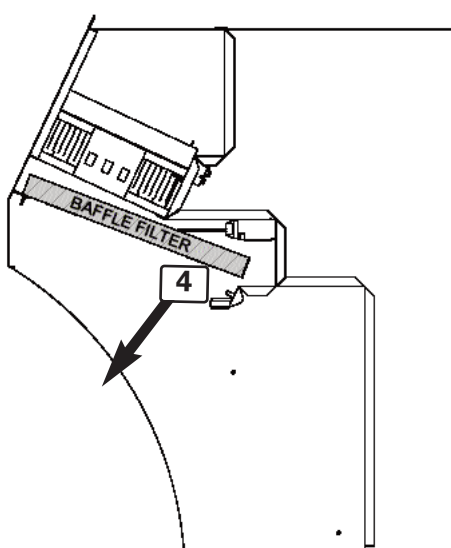
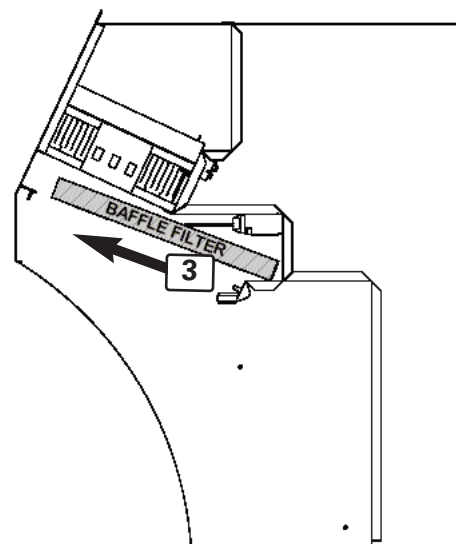
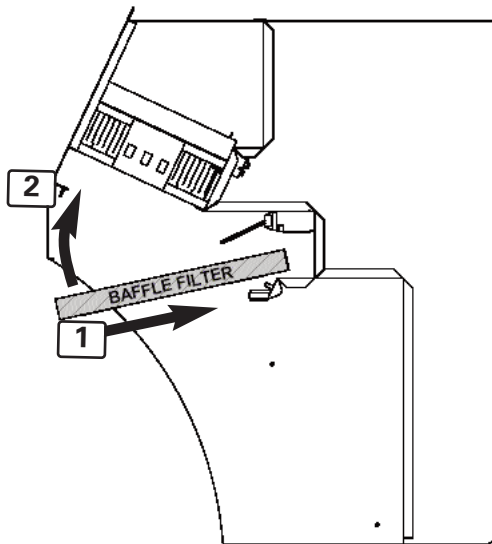
## 7.1.3 Baffle Filter Installation



### WARNING

Sharp edges  
Watch your  
fingers

The Baffle Filter has sharp exposed edges, which may cause cuts. Use due caution when handling and cleaning. Heavy duty rubber gloves are advised.





Switch arm  
must be  
actuated by  
the Baffle  
Filter when  
installed, as  
shown

- ① Insert back edge of filter into hood (*to the back wall*).
- ② Lift front edge up behind **Front Header Panel**.
- ③ Pull filter forward until front edge rests on **support ledge** inside **front panel**.
- ④ Allow back edge to drop down and rest on the **(2) studs in rear channel**.

**IMPORTANT!** As shown above, the filter body must engage and actuate the curved actuator lever located at the rear of hood, on the right side. Filter must be installed so that the slats/slots are vertical, NOT horizontal.

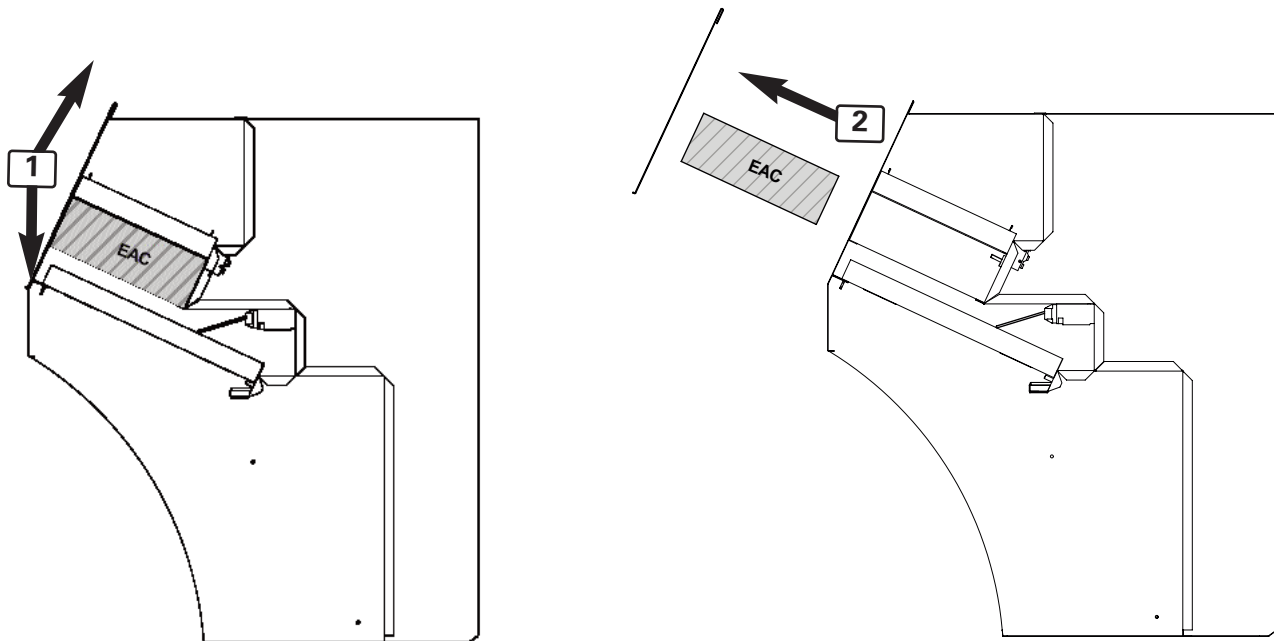
**7.1.4 Baffle Filter Cleaning**

 <p><b>WARNING</b></p>  <p>Sharp edges Watch your fingers</p>	<p>The Baffle Filter has sharp exposed edges, which may cause cuts. Use due caution when handling and cleaning. Heavy duty rubber gloves are advised.</p>
---	---

Generally, the **Baffle Filter** should be cleaned **daily**. Wash filter in sink with a mild degreaser cleaner and warm water. Rinse and dry completely. **Filter must be completely dry before re-installing into hood. Never place wet or damp filter into hood for operation!**

The **baffle filter** can generally be washed in a dishwasher.

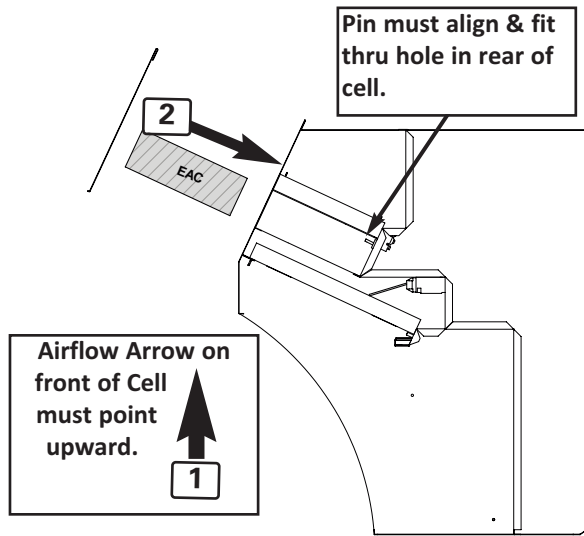
**7.1.5 E.A.C. Filter Cell Removal**



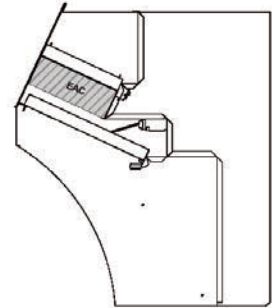
- ① Unlatch **Access Cover** and lift off.
- ② Grasp **E.A.C. Collector Cell** handle and pull cell straight out, at a slightly upward angle.



## 7.1.6 E.A.C. Filter Cell Installation



- ① Ensure the airflow indicator arrow points **[UP]** & the cell's **Contact Pad** faces to the **right side**.
- ② Align cell in **guides** and slide into hood. If installed properly, cell is flush with hood front. **If not the case, cell is not installed correctly.**
- ③ Replace **Access Cover** and latch.



## 7.1.7 E.A.C. Filter Operation Overview - Status & Alarms

The **Electronic Air Cleaner (E.A.C.) system** is designed to electrostatically capture and collect fine grease particulate, removing it from the air stream.

Three **L.E.D. indicator lights** on the control panel give continuous operational status of the system.

**[ON]** Indicates that the E.A.C. cell is installed, powered and operating. Only light **ON** when the system is operating normally.

- [WASH]** This light turns **ON** to indicate:
- Filter cell is not installed or is mis-aligned.
  - Collection fins contain excessive amount of captured grease residue.
  - Poor contact with filter cell contact plate inside hood.
  - Ionizer wire, or wires, completely missing.

When any of these conditions exist, the **[WASH]** light turns **ON** to signal that attention is required to avoid fryer shutdown. **Two (2) minutes** after the light turns **ON**, an alarm tone sounds and heating elements shutdown. The message **"ERROR ALARM - CLEAN THE EAC"** is displayed on the **Upper Display** ①.

**[WASH}** light is **NOT** intended to be a signal for routine cleaning of the cell, **DO NOT use as such**. Typically, the collection cell must be cleaned **DAILY** to ensure optimum performance. See **Section 7.1.8, EAC Filter Cell Cleaning**.



**7.1.7 E.A.C. Filter Operation Overview - Status & Alarms • continued**

[CHECK] This light turns **ON** to indicate:

- Ionizer wire broken and touching the cell frame.
- Cell is damaged and has shorted out to ground.
- Collection fins are shorted out because of excessive moisture.

When [CHECK] light is **ON**, system is no longer operating to clean the air, even though the hood and fryer continue to operate. **Controller *does not* issue an alarm for this condition.**

***DO NOT CONTINUE TO USE FRYER WHEN THIS CONDITION EXIST!***

The following actions may clear the alarm condition:

1. Turn **OFF** hood **Power Switch**.
2. Remove the E.A.C. cell and clean as described in **Section 7.1.8**.
3. Inspect the cell for broken or missing ionizer wires, bent fins, or other damage. Ionizer wires are replaceable (when ordering replacements, note length ... **20"**). Bent fins may be gently straightened by hand, such that no fins are touching adjacent fins. A cell with excessive damage (broken frame, badly bent frame, broken insulators, etc) must be replaced.
4. Inspect the E.A.C. contact pad inside hood. Clean grease accumulation away with a mild degreasing cleaner and dry thoroughly.
5. Replace filter cell (**Section 7.1.6**) and restart fryer (**Section 5.1.9.2**). If the condition persist, contact a qualified service technician. If none of the LED lights turn **ON**, the EAC power supply may be faulty.

***IMPORTANT! If no L.E.D. indicators turn ON up when the fryer is powered up, the E.A.C. system may have an internal malfunction. A qualified service technician will be required.***

## 7.1.7.1 E.A.C. Filter Cell Cleaning Timer

This feature was implemented to help users adhere to a proper cleaning routine for the *E.A.C. Collector Cell*, as timely cleaning is necessary to ensure the hood section continues to effectively clean the air. It is a countdown timer which is programmed to issue a **warning** signal, alerting the user that the *collector cell* needs to be cleaned **soon**. If no action is taken within the allotted time, a **timeout alert** is issued, the fryer is shutdown, and *disabled from continued operation* until cell is cleaned. When cleaning is performed, the timer resets, fryer operation is restored, and a new countdown begins. To avoid the possibility of *lock out*, **performed cleaning DAILY**, as prescribed.

Timer indicators and a **Snooze** control are located on the left side of the fryer control panel.

Details of operation shown below.

### Timer Operation:

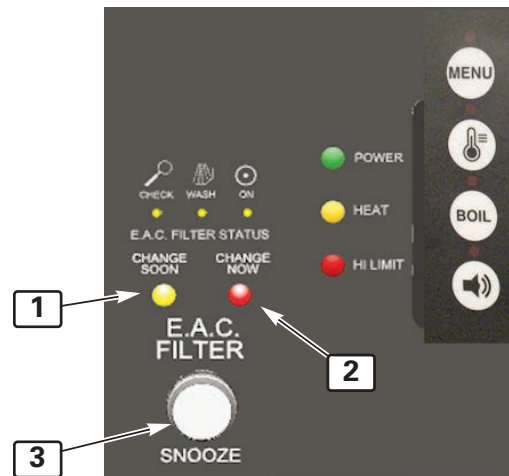
**1 CHANGE SOON**  
The amber indicator light turns **ON** when the **timer** enters **[WARNING]** mode. If the **collector cell** is cleaned within the next **24 hours**, timer automatically resets, begins a new countdown and *normal operation continues without interruption*.

**2 CHANGE NOW**  
The red indicator light turns **ON** when the **timer** enters **[TIMEOUT]** mode, signaling that allowed time before cleaning has expired. An audible alarm sounds and the fryer is shutdown, and will remain *locked out of continued operation* until the cell is cleaned.

Place the **POWER Switch** in the **[OFF]** position to silence the alarm. Fryer will power up even if switch is returned to **[ON]** until the timer is reset by cleaning.

**3 SNOOZE**  
The **SNOOZE** feature is provided in the event that **[TIMEOUT]** occurs during a period of high customer demand, or while cooking is in progress. When **timer** has *timed out*, press the **SNOOZE Button** to temporarily reset it back to **[WARNING]** mode for a period of **2 hours**, allowing continued operation.

**Only two (2) SNOOZE periods can be used.** During the second period, the **CHANGE SOON** light will flash, indicating that timer is in the final snooze period. After second period expires, the appliance is locked-out and cannot be restarted until the cell is cleaned.



**7.1.8 E.A.C. Filter Cell Cleaning**



The E.A.C. collector cell contains parts fabricated from thin gauge sheet metal that can potentially have sharp edges, which may cause cuts if not handled properly. To avoid injury, exercise due care when handling and/or cleaning the cell. **It is recommended that heavy-duty rubber gloves be worn as a precaution.**

The E.A.C. collector cell is sustainable and renewable; it should last for years if cleaned and handled properly. To maintain peak performance, it **MUST BE CLEANED DAILY**; not doing so can lead to an interruption of appliance operation, premature failure of the electronic cleaning system, or reduced useful life of consumable charcoal filters. Follow the procedures detailed below for effective cleaning.

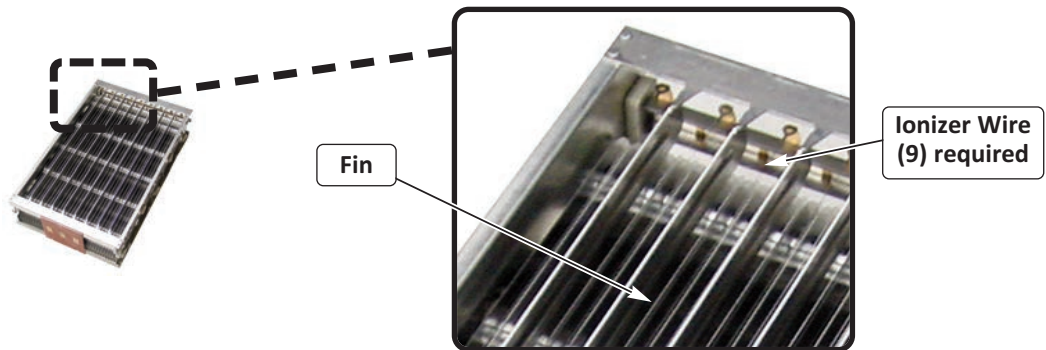
**IMPORTANT:** The cell **CANNOT** withstand washing in commercial dishwashing equipment, and some commercial cleaners/detergents will cause oxidation, or create a layer of contamination, on the aluminum collection fins that can lead to system malfunction and result in interruption of power to appliances being served by a ventless hood unit.

Two (2) different cleaning methods are endorsed by GILES Food Service, as follows.

- Preferred **spray foam method** uses **Simple Green® Crystal Foaming Spray Cleaner/Degreaser**. A readily available foaming aerosol that is an exceptionally effective cleaner, as well as being safe for use on aluminum (**NSF approved**, food-grade, non-toxic, and biodegradable). Cleaning the E.A.C. cell is quick and easy with this convenient ready-to-use cleaner. A complimentary sample is supplied with new equipment. It can be ordered from Giles, **item #41510 (12-count case)**. When used as directed, a case of cleaner should approximately be a 4 to 5 week supply, depending on equipment model.
- Alternative **soaking method** uses a diluted solution of **Simple Green® Pro-HD** and water. Although not as convenient as the spray method, requiring more planning and time, the procedure has proven to be very satisfactory for cleaning E.A.C. collector cells for many years. This product has the same characteristics of the spray product, but requires mixing with water before use ... **dilution factor is 1:12**, e.g. mix 1/2 gal. of cleaner with 6 gals. of water.

**With proper care, cleaning, and handling, the E.A.C. collector cell is designed to provide years of service.**

**CAUTION** While handling and cleaning the cell, take care not to bend the collection fins or break the fine ionizer wires that are stretched across the face of the cell. Bent fins and broken/missing wires can prevent the electronic collection system from performing properly. System faults and alarms will occur that can potentially interrupt appliance operation.

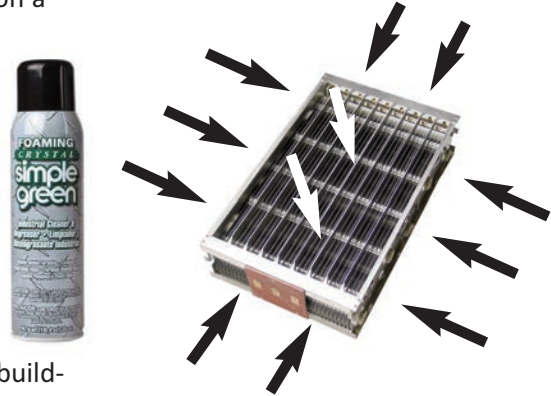


**Damage from abusive handling and/or improper maintenance may not be covered by the factory warranty.**

## 7.1.8 E.A.C. Filter Cell Cleaning - continued

### A. Preferred Cleaning Method - Spray Cleaner

1. Remove collector cell from hood (see **Section x.xx.x**) and lay on a drain board, or other suitable surface.
2. Holding the can at an appropriate distance, spray **Simple Green® Crystal Foaming Degreaser** onto the E.A.C. cell, completely covering all surfaces ... collection fins, contact plate, brass fittings and inside corners of frame. Turn cell over and apply to the other side in like manner, ensuring that both sides of all collector fins are completely covered with the foam.
3. Allow foam to soak for **5 to 10 minutes**. In cases of extreme build-up, a second application may be required after rinsing.



4. Carefully move cell to sink and rinse thoroughly, using hot water spray. **Rinse ONLY, DO NOT scrub with brushes.**
5. Stand cell upright on end on a drain board, w/contact plate up ... allow it to drain and air dry overnight. The cell must be completely dry before being replaced in hood unit. If desired, a small electric fan can be used to blow across the cell to help expedite drying.
6. Before replacing cell in the hood, inspect for broken/missing ionizer wires and bent fins. Broken or missing wires need to be replaced promptly. Bent fins may be straightened by hand so that no fins are touching adjacent fins.



**IMPORTANT! ONLY Simple Green® Crystal Foaming Cleaner/Degreaser is recommended by GILES for cleaning the E.A.C. cell in this manner. Other spray cleaners can contain corrosive ingredients that may damage the metal components of the cell, causing it to fail or not perform properly. Such damages are not covered by the factory warranty.**

### B. Alternate Cleaning Method - Soaking

The factory-recommended product to use for cleaning the E.A.C. cell in this manner is **Simple Green® Pro-HD**. It is a readily available, biodegradable, non-toxic degreasing cleaner that is safe for use on aluminum. It performs well to clean the cell when diluted at a **1:12 ratio** (e.g. 1/2 gal. cleaner to 6 gals ambient water). **DO NOT use DISHWASHING DETERGENTS or CORROSIVE CLEANERS as they can contain ingredients that may damage the metal cell components, causing failure or unsatisfactory performance. Such damages are not covered by the factory warranty.**

1. Cleaning with this method requires a suitable, leakproof container, such as a tall trash bin, recycle bin, plastic tote, etc. that is large enough to hold the cell along with enough degreasing solution to completely cover and soak it, either standing on end, on edge, or lying flat.



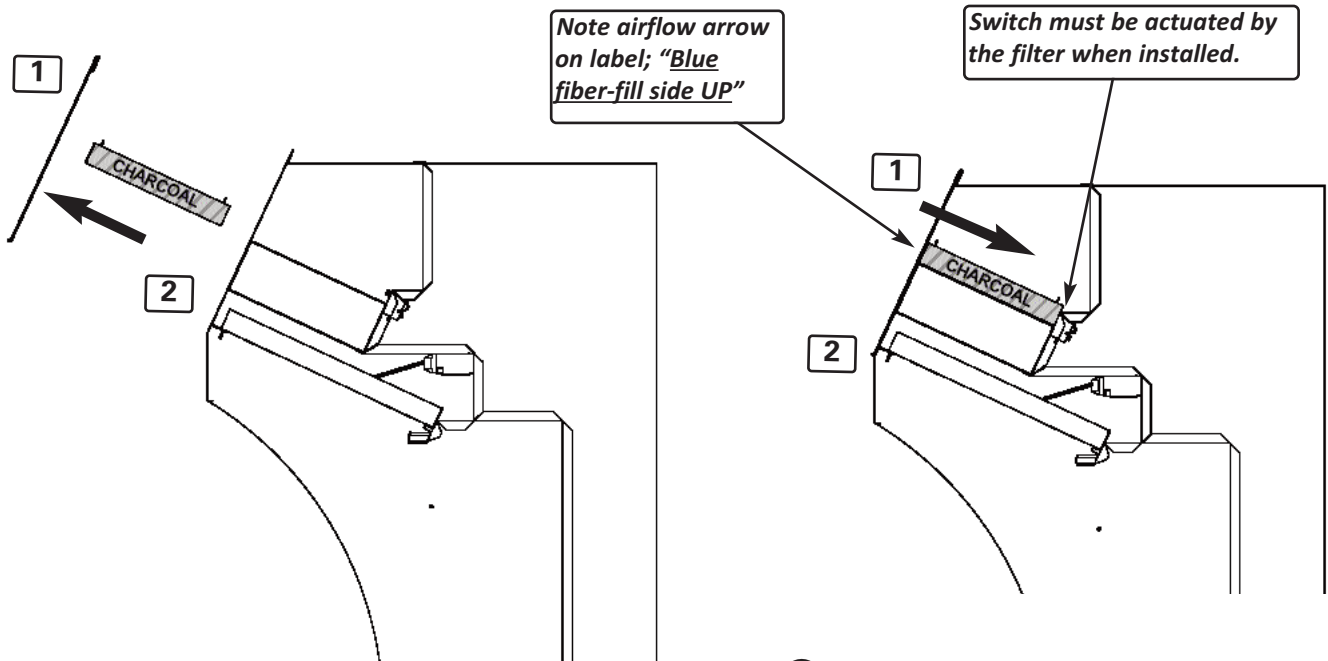
**7.1.8 E.A.C. Filter Cell Cleaning - continued**

2. Fill the container with fresh water to a level that will cover the cell. Measure water as filling and note the quantity. Add **Simple Green® Pro-HD** in the **ratio of 1:12** to the water (*e.g. 8 gals of water would require .67 gals (2 qts+21 ozs) degreaser*). Stir solution well to mix.
3. After preparing a quantity of degreaser solution sufficient to completely cover the cell in the soaking container, hold cell by the contact plate, the frame, or the handle and carefully place it into the solution. Be sure that it is fully submerged.
4. Allow cell to soak for approximately **20 minutes (no more than 30 mins)**, then lift it slightly and briefly agitate it in the solution to help dislodge grease residue.
5. Carefully remove cell from container and follow **Steps 4 thru 6** as detailed in the previous section.



**NOTE:**  
 The degreasing solution may be used multiple times ... cover container with a lid or other suitable cover when not in use to prevent contamination. Discard and replenish solution when a greasy film seems to remain visible, floating on the liquid. When soaking, always ensure that solution completely covers the cell ... add some water if needed.

**7.1.9 Charcoal Filter Removal & Installation**



- ① Unlatch Access Cover and lift off.
- ② Grasp charcoal filter and pull straight out, at an slight upward angle.

- ① Align in guide channels, slide straight into hood. Filter must fit flush with front. **Blue fiber-fill side must face upward.**
- ② Replace and latch cover.



## 7.1.10 Charcoal Filter Maintenance

Charcoal filter cannot be cleaned and reused; **REPLACE ONLY**. It is a one-use, consumable filter that must be periodically replaced. Never attempt to clean the Charcoal Filter; damage to the equipment could result.

Typical replacement cycle is approximately **30 to 40 days**, depending on hours of fryer operations.

Replace the filter with **Giles Item No. 30248**.

**Failure to use Giles OEM Replacement Parts and Filters may void the factory warranty.**

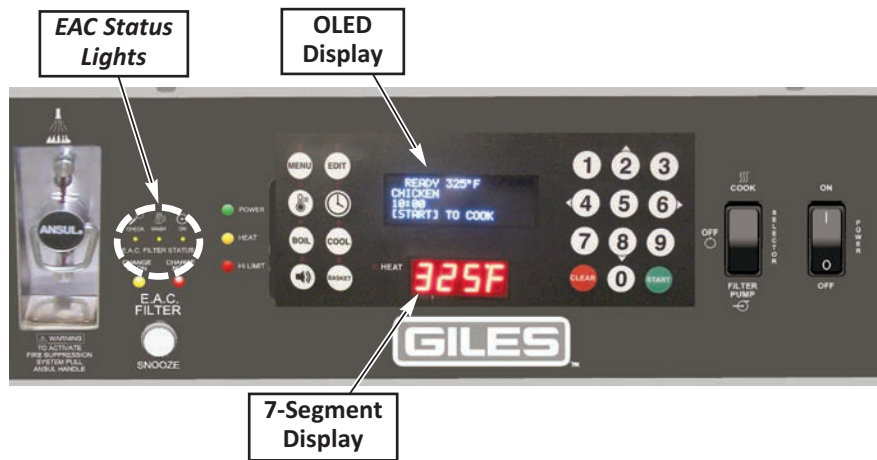
**IMPORTANT!**

Attempting to use a charcoal filter for too long a period of time can lead to a **CLOGGED FILTER** alarm, see Section 7.1.11, Filter Alarm Chart.

Hood capture performance has fallen below minimum requirements, which causes the fryer heating elements to shutdown until the situation is corrected..

## 7.1.11 Filter Alarm Chart

The following table explains the various possible *filter alarms*. When an alarm condition occurs, an audible alarm tone sounds, error code is displayed on the **Lower Display**, and the error description is shown on the **Upper Display**. Refer to **Sections 5.1.10 & 5.1.10.1** for more information.



Error Message [Error Code]	What will happen	Filter Affected	Cause	Solution	See Section
<b>ERROR ALARM - BAFFLE FILTER MISSING [Er21]</b>	<ul style="list-style-type: none"> <li>Continuous tone alarm.</li> <li>Power to heating elements is shutdown.</li> </ul>	Baffle	The Filter is not installed, or is mis-aligned.	Install filter. Check filter alignment.	7.1.2 & 7.1.3



**7.1.11 Filter Alarm Chart - continued**

Error Message [Error Code]	What will happen	Filter Affected	Cause	Solution	See Section
<b>ERROR ALARM - CHARCOAL FILTER MISSING [Er22]</b>	<ul style="list-style-type: none"> <li>• Continuous tone alarm.</li> <li>• Power to heating elements is shutdown.</li> </ul>	Charcoal	The Filter is not installed, or is mis-aligned.	Install filter. Check filter alignment.	7.1.9
<b>ERROR ALARM - CLOGGED FILTER [Er23]</b>	<ul style="list-style-type: none"> <li>• Continuous tone alarm.</li> <li>• Power to heating elements is shutdown.</li> </ul>	Charcoal or Baffle	Airflow restriction is present. charcoal or baffle filter clogged. Other possible restrictions.	Replace charcoal filter, about every 30 days. Clean baffle filter. Check for other airflow restrictions.	7.1.4 & 7.1.10
<b>ERROR ALARM - CLEAN THE EAC [Er24]</b>	<ul style="list-style-type: none"> <li>• EAC Status [WASH] light <b>ON</b></li> <li>• Continuous tone alarm</li> <li>• Power to heating elements is shutdown after 2 mins.</li> </ul>	E.A.C.	Collector cell is dirty. Cell not installed. Contacts dirty. Other fault conditions.	Clean collector cell. Install cell correctly.	7.1.7 & 7.1.8

## 7.2 Maintenance

This section describes the periodic maintenance required for the **Ventless Hood System**. These activities are essential to maintaining continuing hood efficiency and safe operation.

*A Maintenance & Service Log is provided on Page 80.*

### 7.2.1 Monthly Interlock Testing

The hood features a system of interlocks which ensure that the unit operates safely and effectively. Inspection and testing of this system should be performed **MONTHLY**, as described below. Check the appropriate box in the **Service Log** to indicate completion of tests. Every time power is turned **OFF** when performing these tests, be aware that when turned **ON** again the unit will go through the power-up sequence; refer to **Section 5.01.10, Power Up Procedure**

1. **BAFFLE FILTER:** Place **POWER & SELECTOR Switches** in the [OFF] position, remove the **baffle filter (Section 7.1.2)** and replace cover. Confirm that **SELECTOR Switch** is in [OFF] position then turn **ON** power. After power-up, a constant tone alarm should sound, and the **Upper Display** should read “**ERROR ALARM - BAFFLE FILTER MISSING**”. Place **SELECTOR Switch** in the [COOK] position; the amber **HEAT** light should **NOT** turn **ON**. Return **SELECTOR Switch** to [OFF], turn power **OFF**, and reinstall the **baffle filter (Section 7.1.3)**.
2. **E.A.C. FILTER:** Remove the **EAC collector cell (Section 7.1.5)** and replace cover. Confirm that **SELECTOR Switch** is in [OFF] position then turn **ON** power. After power-up, the **EAC status [ON] & [WASH]** lights will turn **ON**. Wait approximately two (2) minutes, a constant tone alarm sounds; the **Upper Display** should read “**ERROR ALARM - CLEAN THE EAC**”. Place the **SELECTOR Switch** in the [COOK] position; the amber **HEAT light** should **NOT** turn **ON**. Return **SELECTOR Switch** to [OFF], turn power **OFF**, and reinstall the **collector cell (Section 7.1.6)**.
3. **CHARCOAL FILTER:** Remove the **charcoal filter (Section 7.1.9)** and replace cover. Confirm that **SELECTOR Switch** is in [OFF] position then turn **ON** power. After power-up, a constant tone alarm should sound; the **Upper Display** should read “**ERROR ALARM - CHARCOAL FILTER MISSING**”. Place the **SELECTOR Switch** in the [COOK] position; the amber **HEAT** light should **NOT** turn **ON**. Return **SELECTOR Switch** to [OFF], turn power **OFF**, and reinstall the **charcoal filter (Section 7.1.9)**.
4. **FILTER CLOGGED:** Place the **POWER Switch** in the [ON]. With hood running, position a piece of filter paper, or other suitable material, such as cardboard, over the **baffle filter** so that the entire area is covered and sealed off. Shortly, a constant tone alarm should sound; the **Upper Display** should read “**ERROR ALARM - CLOGGED FILTER**”. Place **SELECTOR Switch** in the [COOK] position; the amber **HEAT** light should **NOT** turn **ON**. Return all switches to the [OFF] position and remove the filter blockage.
5. **ACCESS COVER:** Place **POWER Switch** in the [ON] position. Note the controller powers up and the hood blower starts running. Unlatch and lift front edge of cover away from hood. Appliance should shutdown completely.

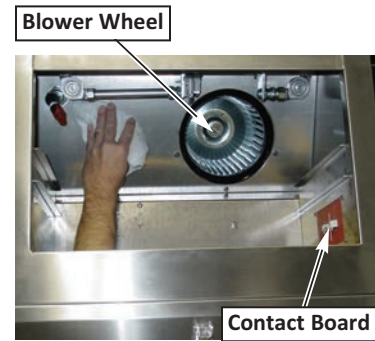
Should any of these tests fail to yield the described results, contact a factory-authorized service company and have the unit evaluated and repaired. Any **Giles Manufacturer’s Representative** can provide information about nearby authorized service companies, or call **Giles Services** at **800-554-4537** for assistance locating an authorized service company in your area.

**7.2.2 Quarterly Ventless Hood Section Cleaning**

Disconnect power from the unit at the main electrical panel. Remove the *Access Cover and all filters*. Using a degreasing cleaner, such as recommended for the EAC cell, deep clean the entire plenum and blower section of the Hood. The recommended cleaning frequency is **every three (3) months**.

Inspect the blower wheel for grease residue build-up on the vanes. Clean with degreaser, if needed.

Ensure that contacts on the **E.A.C. Contact Board** are clean and free of excessive build-up.



**7.2.3 Semi-Annual Fire Suppression System Inspection & Service**

Inspection, servicing and maintenance of the **Fire Suppression System** must be performed by a qualified fire protection equipment service company, having credentials acceptable to *local code authorities (AHJ)*. As a minimum, field inspection of the system shall be performed **every six (6) months** and shall consist of the following:

1. Remove and inspect charging cartridge. Replace gasket, if needed. See **Section 2.8. Fusible Link and Gas Cartridge Locations**. **To prevent accidental system discharge, DO NOT replace cartridge until inspection is complete.**
2. Remove and inspect suppressant chemical tank. Verify proper chemical level. Clean and coat o-ring with high-temperature grease, and reinstall. See **Section 2.9. Fire Extinguisher Nozzle and Tank Locations**.
3. Inspect and clean discharge nozzles. Replace missing or damaged *blow-off caps*.
4. Inspect remote Manual Activation Station for function and wear.
5. Test automatic actuation function with test link. Replace actual link and re-arm system.
6. Inspect and clean fusible links. See **Section 2.8. Fusible Link and Gas Cartridge Locations**
7. Inspect wire rope for wear at pulleys and detectors; replace as needed.
8. Replace gas cartridge, tag system and confirm that it is armed. Record maintenance date and log the inspection in permanent on-site file.

**7.2.4 Annual Fire Suppression System Inspection & Service**

Same as **Semi-Annual** Inspection, **except** for the following:

1. Replace all fusible links. See **Section 2-08. Fusible Link and Gas Cartridge Locations**.

**7.2.5 12-Year Fire Suppression System Inspection & Service**

Same as **Semi-Annual** and **Annual** Inspection, **except** for the following:

1. Remove suppressant chemical from tank. Hydrostatic test storage tank and gas cartridge.
2. Refill storage tank with fresh **R-102 wet chemical fire suppressant**.
3. Flow test the regulator.

# Ventless Hood

# GEF-VH Series Fryers Only

## Maintenance & Service Log

Check							Initial/Date	Check							Initial/Date			
✓	✓	✓	✓				<i>RGS 1/15/10</i>	1	2	3	4							
1	2	3	4					1	2	3	4							
1	2	3	4	5				1	2	3	4	5						
1	2	3	4					1	2	3	4							
1	2	3	4	5	6*			1	2	3	4	5	6*					
1	2	3	4					1	2	3	4							
1	2	3	4					1	2	3	4							
1	2	3	4	5				1	2	3	4	5						
1	2	3	4					1	2	3	4							
1	2	3	4	5	6*	7*		1	2	3	4	5	6*	7*				
1	2	3	4					1	2	3	4							
1	2	3	4					1	2	3	4							
1	2	3	4	5				1	2	3	4	5						
1	2	3	4					1	2	3	4							
1	2	3	4					1	2	3	4							
1	2	3	4	5	6*			1	2	3	4	5	6*					
1	2	3	4					1	2	3	4							
1	2	3	4					1	2	3	4							
1	2	3	4	5				1	2	3	4	5						
1	2	3	4					1	2	3	4							
1	2	3	4					1	2	3	4							
1	2	3	4	5	6*	7*		1	2	3	4	5	6*	7*				
1	2	3	4					1	2	3	4							
1	2	3	4					1	2	3	4							
1	2	3	4	5				1	2	3	4	5						
1	2	3	4					1	2	3	4							
1	2	3	4					1	2	3	4							
1	2	3	4	5	6*			1	2	3	4	5	6*					
1	2	3	4					1	2	3	4							
1	2	3	4					1	2	3	4							
1	2	3	4	5				1	2	3	4	5						
1	2	3	4					1	2	3	4							
1	2	3	4					1	2	3	4							
1	2	3	4	5	6*	7*		1	2	3	4	5	6*	7*				

<b>1</b>	Baffle Filter Check
<b>4</b>	Filter Clogged Check
<b>7</b>	Annual Fire System Insp

<b>2</b>	EAC Filter Check
<b>5</b>	Quarterly Cleaning
<b></b>	

<b>3</b>	Charcoal Filter Check
<b>6</b>	Semi-annual Fire System Insp
<b></b>	

\* Inspection must be by certified fire equipment service company.

**8. Troubleshooting**

**IMPORTANT!** This section describes basic troubleshooting procedures for GEF Model Electric Fryers. Simple operational issues may be corrected by the user, however most in-depth troubleshooting, and repair, should be performed only by qualified service technicians.

<b>8.1 Temperature Control System</b>		
<b>Problem</b>	<b>Probable Cause</b>	<b>Corrective Action</b>
<b>APPLIANCE WILL NOT TURN ON:</b> • <b>POWER</b> light not <b>ON</b> • <b>VH Model</b> - Hood fan not <b>ON</b>	A. Not connected to proper power source	Connect unit to proper power supply
	B. Blown fuse or tripped breaker in electrical supply panel	Check electrical panel, replace fuse or reset breaker
	C. Blown fuse in unit or faulty fuse holder	Check/replace fuses and/or fuse holders behind Fryer Control Panel
	D. ( <b>VH Model</b> ) Hood filter cover not positioned & latched properly	Position cover properly; pin on right corner must engage interlock switch
	E. Faulty power switch	Check/replace power switch
	F. Fire suppression system not armed	Contact Ansul service company
	G. ( <b>VH Model</b> ) <i>EAC Cleaning Timer</i> has expired; red <b>CHANGE NOW</b> light is <b>ON</b>	Clean EAC cell, or press <b>SNOOZE</b> button to continue operation for 2 hours
<b>FRYER DOES NOT HEAT:</b> • <b>POWER</b> Light is <b>ON</b> • Amber <b>HEAT</b> light is <b>OFF</b>	A. Selector switch not in the <b>[COOK]</b> position	Place selector switch in <b>[COOK]</b> position
<b>FRYER DOES NOT HEAT:</b> • <b>POWER</b> light is <b>ON</b> • Selector switch is in <b>[COOK]</b> position • Amber <b>HEAT</b> light is <b>OFF</b>	A. Controller temperature setpoint is lower than actual oil temp	Reset the temperature or if actual temp is correct, begin cooking
	B. <b>DRAIN OPEN</b> message; alarm sounding	Close valve fully to reset alarm
	C. Faulty controller	Check/replace Controller
	D. Temperature sensor faulty; Er13 displayed	Check wiring; replace sensor
	F. Contactor is faulty	Check/replace Contactor
	G. Selector switch faulty	Check/replace Switch
	I. Power-up procedure not completed	At <b>POWER FAILURE</b> msg, press <b>[START]</b> to begin <b>PREHEAT</b>
<b>FRYER WILL NOT HEAT (certain models ONLY):</b> • <b>POWER</b> light is <b>ON</b> • Selector switch in <b>[COOK]</b> position • Amber <b>HEAT</b> Light is <b>ON</b>	A. Circuit breaker on rear of fryer cabinet tripped	Reset circuit breaker

<b>8.1 Temperature Control System - continued</b>		
<b>Problem</b>	<b>Probable Cause</b>	<b>Corrective Action</b>
<b>FRYER WILL NOT HEAT:</b> <b>(VH Model Only)</b> <ul style="list-style-type: none"> <li>• <b>POWER</b> light is <b>ON</b></li> <li>• Selector switch in <b>[COOK]</b> position</li> <li>• <b>HEAT</b> light is <b>OFF</b></li> <li>• Steady tone alarm sounding</li> <li>• <b>“MISSING FILTER”</b> message displayed on controller</li> </ul>	A. Baffle filter missing	Check, install baffle filter
	B. Baffle filter misaligned	Check, reinstall, or properly align baffle filter
	C. Charcoal filter missing or misaligned	Check, reinstall, or properly align charcoal filter
<b>FRYER WILL NOT HEAT:</b> <b>(VH Model Only)</b> <ul style="list-style-type: none"> <li>• <b>POWER</b> light is <b>ON</b></li> <li>• Selector switch in <b>[COOK]</b> position</li> <li>• <b>HEAT</b> light is <b>OFF</b></li> <li>• <b>EAC [WASH]</b> light is <b>ON</b></li> <li>• Steady tone alarm sounding</li> <li>• <b>“CLEAN THE EAC”</b> message displayed on controller</li> </ul>	A. EAC cell is excessively dirty	Clean the cell as previously described
	B. Too many ionizer wires on the cell are broken/missing	Replace ionizer wires
	C. Poor connection at contact board; dirty or damaged	Clean contacts, or replace board
	D. EAC cell is missing	Install or reinstall EAC Cell
<b>NORMAL FRYER OPERATION:</b> <b>(VH Model Only)</b> <ul style="list-style-type: none"> <li>• <b>POWER</b> light is <b>ON</b></li> <li>• Selector switch in <b>[COOK]</b> position</li> <li>• <b>EAC [CHECK]</b> light staying <b>ON</b></li> <li>• No alarm</li> </ul>	A. Ionizer wire broken • touching cell frame.	Replace wire
	B. Cell damaged • shorted to ground	Inspect cell, replace if needed
	C. Collection fin shorted out due to excessive moisture	Eliminate cause; cold air from a/c being drawn into hood, excessive moisture in food, etc.
<b>FRYER WILL NOT HEAT:</b> <ul style="list-style-type: none"> <li>• Power Light is <b>ON</b></li> <li>• Selector Switch is in <b>[COOK]</b> position</li> <li>• Red <b>HILIMIT</b> light is <b>ON</b></li> </ul>	A. Power surge tripped thermostat	Turn <b>OFF</b> power for approx 5 secs, return to <b>[ON]</b>
	B. Low oil level	Check level, add oil as needed
	C. Contactor is sticking	Check/replace Contactor
	D. High Limit safety board is faulty	Check/replace High Limit board
	E. High Limit sensor is faulty, or out of position	Check, adjust, or replace sensor
	E. Controller is faulty	Check/replace Controller
<b>FRYER WILL NOT HEAT:</b> <b>(VH Model Only)</b> <ul style="list-style-type: none"> <li>• Power Light is <b>ON</b></li> <li>• Selector Switch in <b>[COOK]</b> position</li> <li>• Heat Light is <b>OFF</b></li> <li>• Constant tone alarm sounding</li> <li>• <b>“CLOGGED FILTER”</b> message displayed on controller</li> </ul>	A. Charcoal filter clogged	Replace charcoal filter
	B. Vacuum switch requires adjustment, or is faulty	Adjust switch, replace if needed
	C. Vacuum lines clogged or kinked	Inspect tubing clean or remove kinks
	D. Blower running too slow	Check voltage
	E. Blower vanes clogged w/residue	Inspect blower, clean

<b>8.1 Temperature Control System - continued</b>		
<b>Problem</b>	<b>Probable Cause</b>	<b>Corrective Action</b>
<b>FRYER HEATS SLOWLY:</b> • Slow heat recovery • <b>HEAT</b> light remains <b>ON</b> constantly	A. Improper cooking procedures	Consult Manual for proper procedures
	B. One or more heating elements faulty	Check/replace faulty element(s)
	C. Contactor failing	Check/replace Contactor
	D. Wiring at elements loose	Inspect/repair wiring
	E. Low incoming supply voltage	Check/repair supply power
<b>FRYER HEATS SLOWLY</b> • Short cycling, <b>HEAT</b> light turning <b>ON/OFF continuously</b>	A. Low incoming supply voltage	Check/repair supply power
	B. Variable temp sensor too close to heating element	Correct sensor position
	C. Controller malfunctioning	Replace controller
<b>OIL TEMPERATURE ERRATIC:</b>	A. Faulty temperature sensor	Replace probe
	B. Contactor is failing	Replace contactor
	C. Controller malfunctioning	Replace Controller
	D. Wiring at elements loose	Inspect/repair wiring
<b>OIL SMOKING:</b>	A. Oil too old • broken down	Replace oil with fresh
	B. Cooking at too high a temperature	Check temperature setpoint, adjust
	C. Carbon build-up on heating elements	Perform boil-out, clean the fry pot
	D. Element failure	Check/replace elements
	E. Improper incoming supply voltage	Verify incoming power
	F. Low oil level	Maintain oil level at <b>[FULL]</b> level mark



8.2 Oil Filtration System		
Problem	Probable Cause	Corrective Action
OIL NOT PUMPING BACK FROM FILTER PAN TO FRY POT:	A. <b>Selector Switch</b> not in [FILTER PUMP] position	Place switch in proper position
	B. Air leak in the system • hoses • fittings • connector • filter pan	Inspect & stop air leak • be sure quick-connect fitting is secure
	C. Pump motor faulty	Check/replace Motor
	D. Oil pump clogged or damaged	Check/repair Pump
	E. Excessive sludge in filter pan	Clean filter pan • replace media
OIL PUMP LOCKED UP	A. Boil-out solution has been run through filter pump	Disassemble pump head, clean & re-oil
	B. Oil allowed to setup inside pump	Disassemble pump head & clean

8.3 Basket Lift System		
Problem	Probable Cause	Corrective Action
BASKET LIFT DOES NOT FUNCTION:	A. Power not <b>ON</b>	Place <b>Power Switch</b> in [ON] position
	B. Controller malfunction	Check/replace controller
	C. Cooking cycle in progress	Cancel cycle or wait for completion
	D. Basket lift micro-switch out of adjustment	Inspect/adjust switch
	E. Basket lift micro-switch faulty	Check/replace switch
	F. Basket lift motor/gearbox faulty	Check/replace lift motor
	G. Controller still in <b>PREHEAT</b> state, oil is not at <b>READY</b> temperature.	Allow oil to reach cooking temperature
	H. Basket has just finished a run cycle	When activated, lift <b>will not</b> activate again for about 20 secs



## 9. Parts List

This section lists various parts that are, typically, field replaceable on **GEF Electric Fryers**. It is provided to aid qualified service technicians who are servicing or repairing this equipment. Repair of this equipment should only be attempted by training kitchen equipment service technicians.

### 9.1 Parts Ordering & Service Information

If assistance or repair is required, please contact a *Giles Manufacturer's Representative* to assist with locating an authorized service provider in your area. For further assistance you may contact the **GILES Technical/Customer Service Support** as follows:

**IN THE UNITED STATES & CANADA call: 800.554.4537**

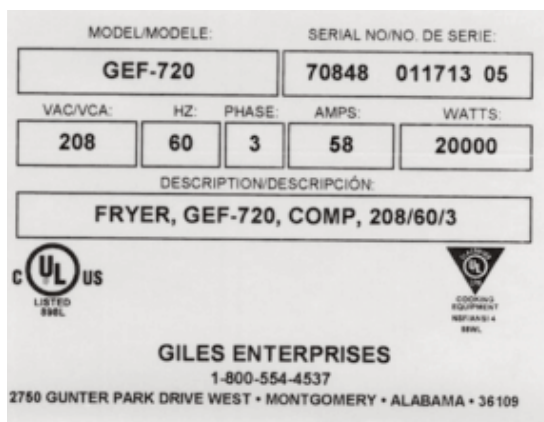
**ALL OTHERS call: 334.272.1457**

Normal business hours are 8:00 AM to 5:00 PM Central Time ... calls are handled by an automated answering system. Please follow the recorded prompts to reach appropriate support. ***If necessary after hours, leave voicemail message ... a representative should respond within approximately 30 minutes.***

Website: [www.gfse.com](http://www.gfse.com) Email: [services@gfse.com](mailto:services@gfse.com)

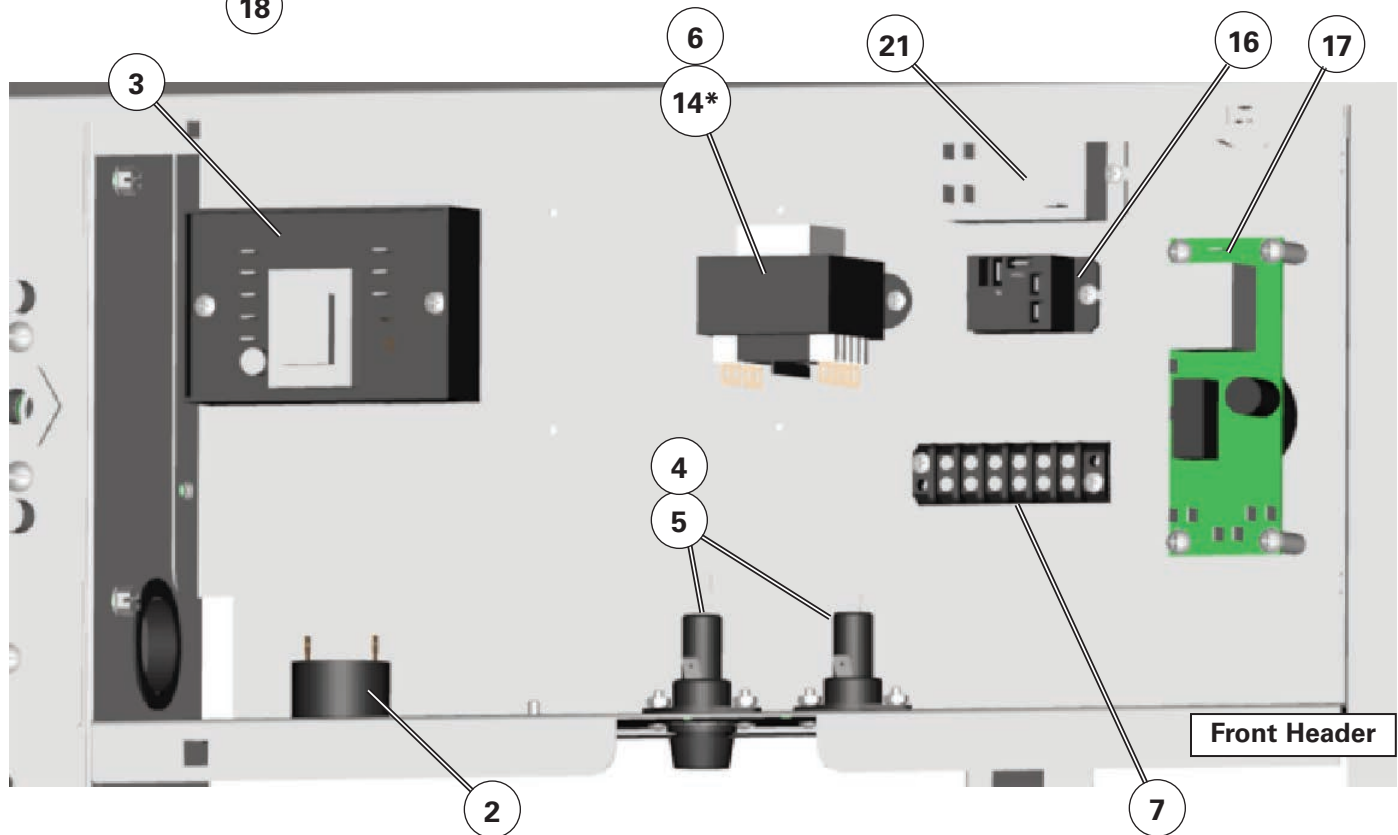
Our goal at Giles is to provide the highest possible quality of service and assistance. To help us accomplish this, please have the following information readily available when calling, along with a brief description of the problem being experienced. Please record the unit information in the table below for quick reference.

<b>Model:</b>	
<b>Serial Number:</b>	
<b>Voltage:</b>	
<b>Phase:</b>	



The information can be found on the serial/data label located inside the fryer cabinet or on the cabinet rear panel.

9.2 Control Panel & Front Header



\* Not Shown

# Parts List

## GEF & GEF-VH Series Fryers

### 9.2 Control Panel & Front Header

#### Regular GEF Fryer:

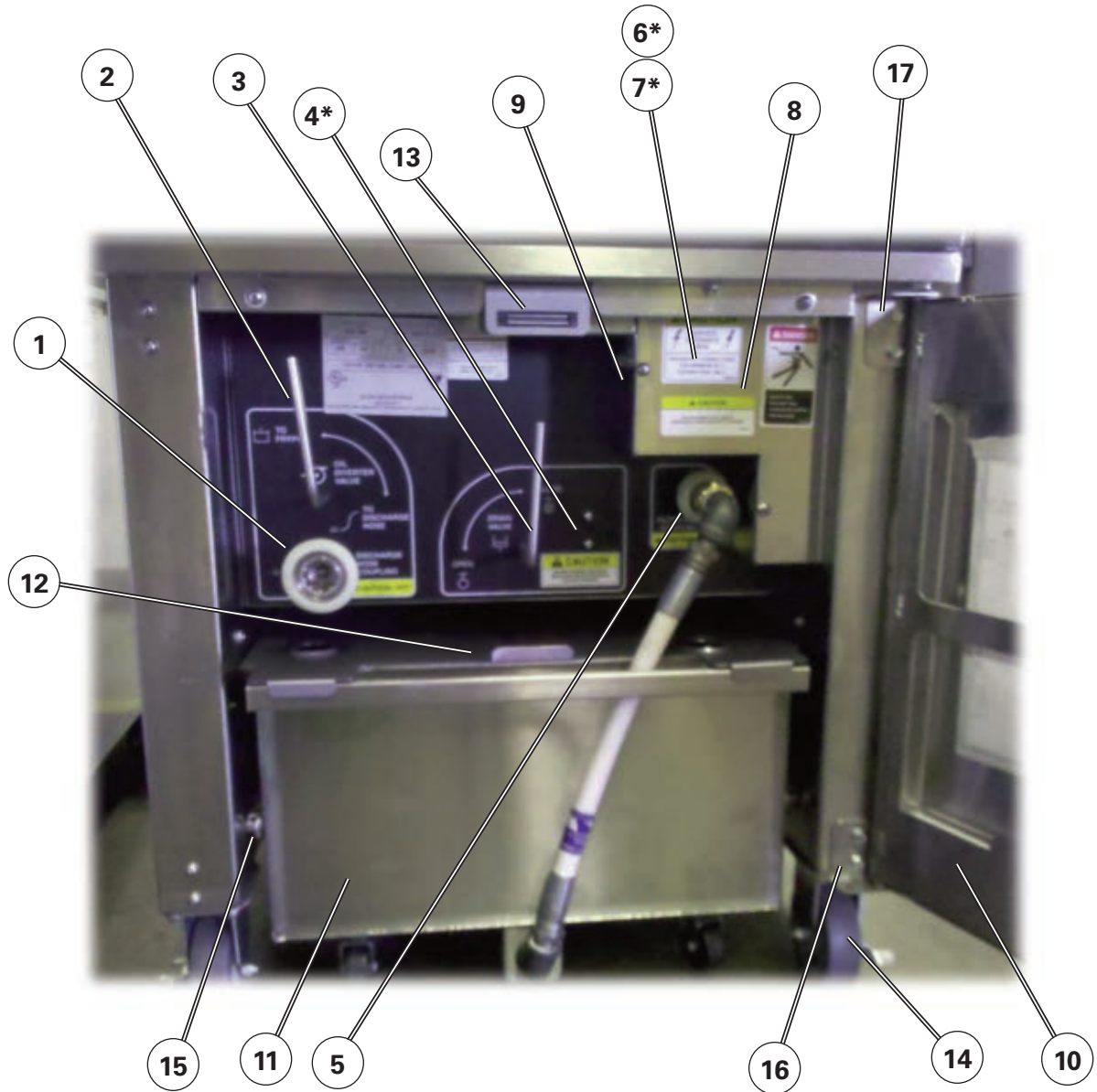
Item	Part Number	QTY.	Description
2	22976	1	AUDIOLARM, CONTINUOUS, 2-12 VDC
3	23754	1	THERMOSTAT, HILIMIT, WATLOW, 425DEG, 208/240
4	21950	2	HOLDER, FUSE, 300V, 15A, SC 0 TO 15
5	21900	2	FUSE, 15-AMP, SC-15
6	20366	1	TRANSFORMER, 20VA, 115/230V, 60HZ, CL2
7	23751	1	TERMINAL BLOCK, MA106
8	21190	1	SWITCH, ROCKER, ON-OFF, 250V, 20A, D.P.
9	21189	1	SWITCH, ROCKER, ON-OFF-ON, 250V,20A,S.P.
10	21374	1	CONTROLLER, SINGLE TIMER, CC10
11	20398	1	LIGHT, INDICATOR, GREEN, 250V
12	20399	1	LIGHT, INDICATOR, ORANGE, 250V
13	20402	1	LIGHT, INDICATOR, RED, 250V
14*	38365	1	FUSE ASSY, CONTROLLER TRANSFORMER
15	20307	3	RETAINING CLIP, INDICATOR LIGHT
21	21417	1	RELAY, POWER SWITCH, 30A/2.5HP, 240V

#### Ventless GEF-VH Fryer Only:

Item	Part Number	QTY.	Description
1	24209	1	L.E.D. CLUSTER, E.A.C.
16	21203	1	RELAY, SPST-NO, 240V
17	20572	1	EAC TIMER, BOARD W/LIGHTS & P.BUTTON
18	20692	1	SWITCH, MOMENTARY, PUSH-BUTTON
19	20693	1	PILOT LIGHT, RED, EAC TIMER
20	20694	1	PILOT LIGHT, YELLOW, EAC TIMER
22	30238	1	MANUAL PULL, MODIFIED

\* Not Shown

9.3 Front Lower Cabinet



\* Not shown

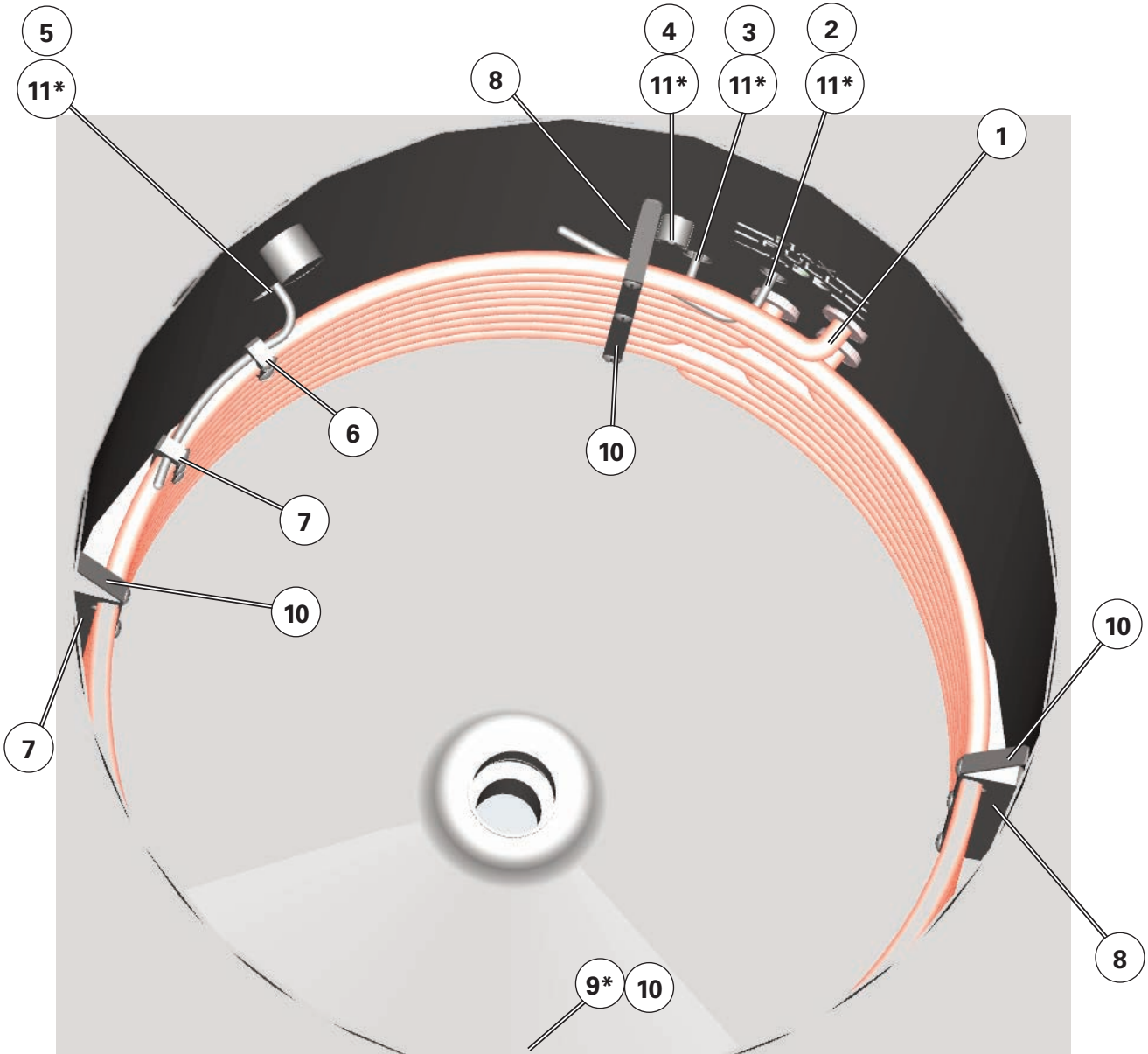
## 9.3 Front Lower Cabinet

Item	Part Number	Qty	Description
1	41699	1	COUPLING, QUICK DISCONNECT, FEMALE
2	38888	1	DIVERter VALVE HANDLE
3	96688	1	DRAIN VALVE HANDLE
4*	21386	2	SWITCH, LIMIT, SPDT, DRAIN, PREWIRED <b>(BEHIND PANEL)</b>
5	41900	1	COUPLING, QUICK-DISCONNECT, FEMALE
6*	20304	2	TERMINAL BLOCK, GROUND, 4-12 GA WIRE
7*	20303	3	TERMINAL BLOCK, 4-12 GA WIRE
8	38881	1	COVER, SERVICE BOX
9	38880	1	SHROUD, SERVICE BOX
10	38845	1	DOOR, WELD ASSY, GEF-400/560/720
11	38834	1	FILTER PAN, ASSY, GEF-400/560/720
12	93003	1	FILTER PAN COVER, WELD ASSY, UNIVERSAL
13	40851	1	CATCH, MAGNET, DOOR, SNAP IN, 2.3IN
14	40806	2	CASTER, 5-IN, RIGID, W/BRAKE, PLT. MT.
15	40315	8	ROLLER, BALL-BEARING, FILTER PAN DOCKING
16	90988	1	DOOR HINGE, RIGHT PIN
17	90989	1	DOOR HINGE, LEFT PIN

\* Not shown



9.4 Fry Pot



\* Not shown

## 9.4 Fry Pot

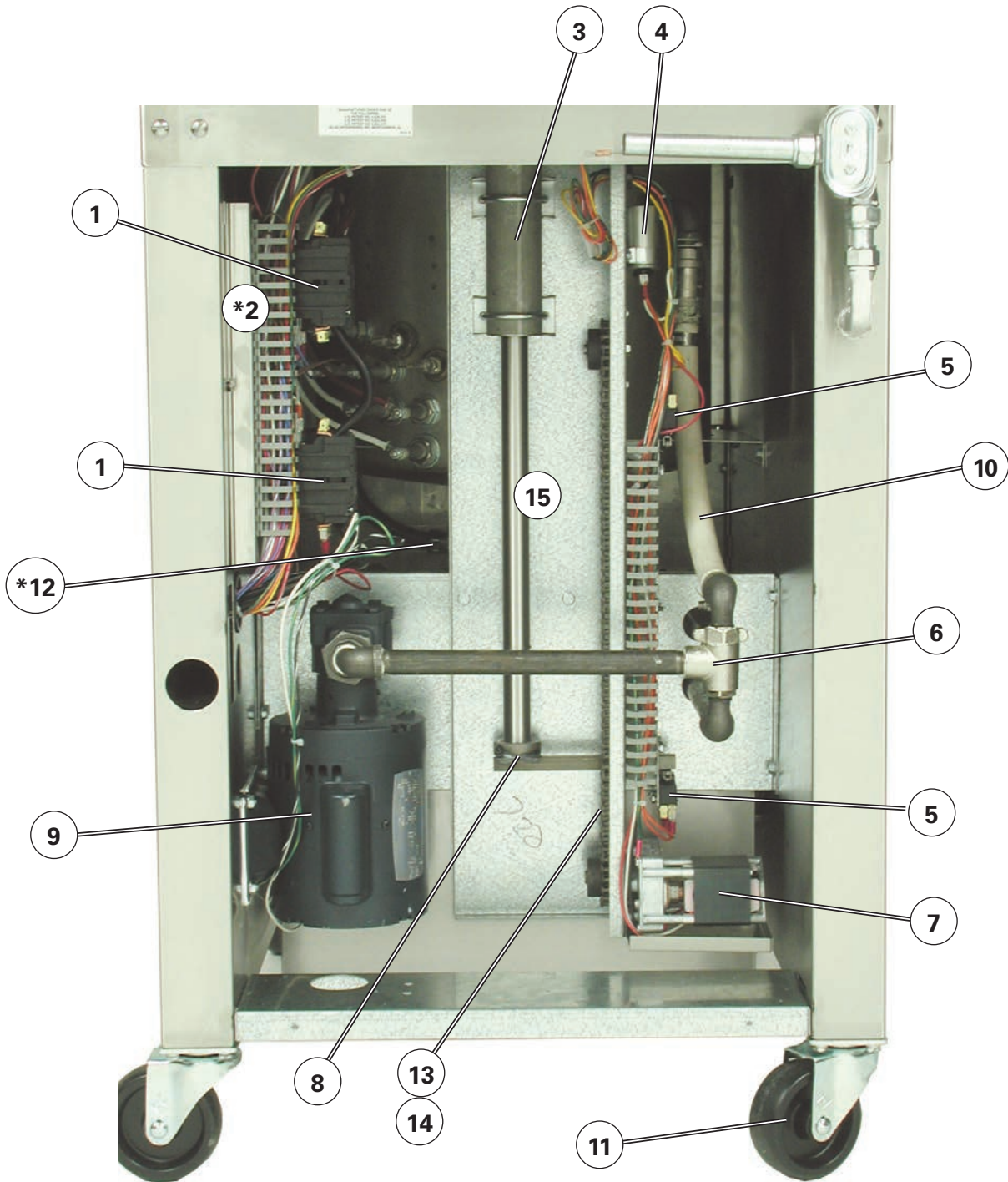
Item	Part Number	Qty.	Description
1	20306	3	ELEMENT, 6666W, 208V, <b>GEF-720</b>
	20309	3	ELEMENT, 6666W, 240V, <b>GEF-720</b>
	20313	3	ELEMENT, 6666W, 480V, <b>GEF-720</b>
	21526	3	ELEMENT, ROUND, 5000W, 208V, <b>GEF-560</b>
	21299	3	ELEMENT, ROUND, 5000W, 240V, <b>GEF-560</b>
	21527	3	ELEMENT, ROUND,3333W,208V, <b>GEF-400</b>
	21298	3	ELEMENT, ROUND,3333W,240V, <b>GEF-400</b>
2	23908	1	THERMOCOUPLE, TYPE-J, 7-1/2" BENT, GROUNDED (HI-LIMIT)
3	23909	1	THERMOCOUPLE, TYPE-J, 3", GROUNDED (VARIABLE)
4	20439	1	THERMOCOUPLE, TYPE-J, 3", UNGROUNDED (ADD-LEVEL)
5	20571	1	THERMOCOUPLE, TYPE-J, 7-1/2", UNGROUNDED (ELEM TEMP)
6	96481	1	ELEMENT PROBE BRACKET, SINGLE
7	96475	1	ELEMENT PROBE BRACKET, DOUBLE
8	38894	3	BRACKET, ELEMENT, W/HOLE, GEF-720
	33437	3	BRACKET, ELEMENT, W/HOLE, GEF-560/400
9*	38895	1	BRACKET, ELEMENT, LONG, GEF-720
	33355	1	BRACKET, ELEMENT, LONG, GEF-560/400
10	38896	4	CAP, ELEMENT BRACKET, GEF-720
	33354	4	CAP, ELEMENT BRACKET, GEF-400/560
11	45400	4	CONNECTOR, 0.190 ID, 1/4NPT, SWAGELOCK ( <b>INCLS. #45111 FERRULE</b> )

### IMPORTANT!

When replacing Thermocouple Probes (#2, #3, #4, or #5) without replacing the associated Swagelock Connector, a new **Ferrule #45111** is required.

\* Not shown

9.5 Rear Lower Cabinet



\* Not shown

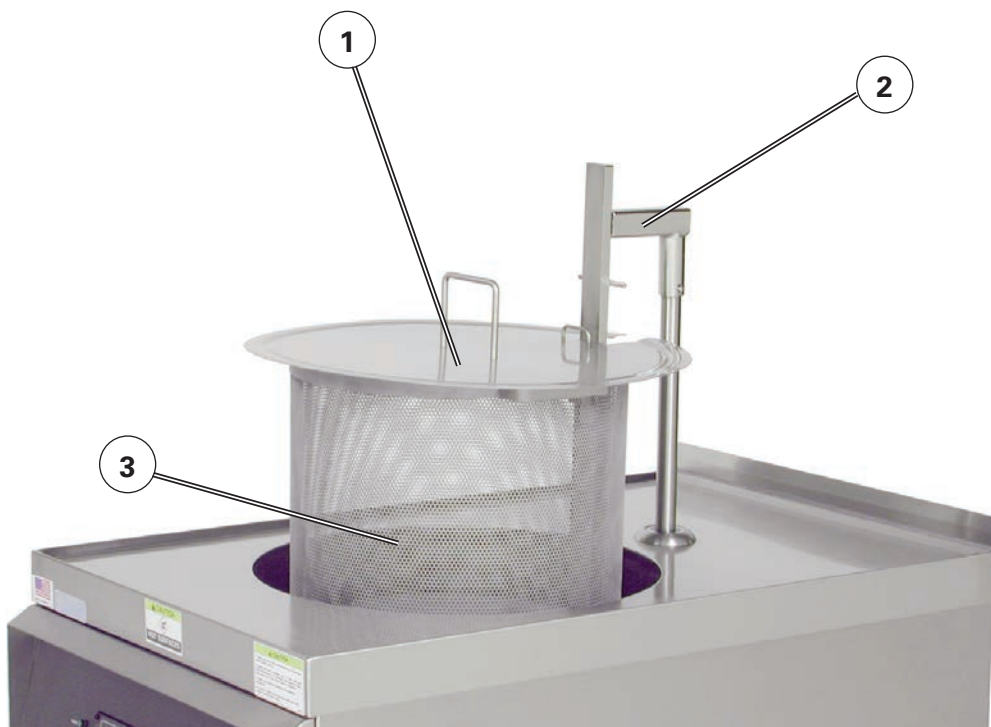
Due to continuing equipment improvements, some actual components may appear different than depicted in this Manual.

## 9.5 Rear Lower Cabinet

Item	Part Number	Qty.	Description
1	21245	2	CONTACTOR, 208VAC, 63A (GEF400/1PH, GEF400-560-720/3PH))
	20617	2	CONTACTOR, 240/480VAC, 63A (GEF400/1PH, GEF400-560-720/3PH)
	21260	2	CONTACTOR, 208VAC, 80A (GEF-560)
	21261	2	CONTACTOR, 240VAC, 80A (GEF-560)
2*	20513	1	BREAKER, CIRCUIT, 277V, 50A, 6 PL (1PH UNITS & 208/240V GEF720)
3	40770	1	SHAFT & CYLINDER ASSY, BASKET LIFT
4	20122	1	CAPACITOR, 4mfds,370V,GEF
5	23201	2	SWITCH, SNAP ACTION, ROLLER TYPE
6	45755	1	VALVE, 3-WAY, 1/2NPT, NICKEL PLATED
7	20120	1	MOTOR, 230V, ELEVATOR,GEF
8	38824	1	ELEVATOR CARRIER, WELD ASSY, GEF
9	71754	1	PUMP & MOTOR ASSY (76923 Pump Head Only, 71753 Motor Only)
10	41080	1	HOSE, CORRUGATED, SS, 1/2 ID X 20"
11	40807	2	CASTER, 5-IN, SWIVEL, W/O BRAKE, PLT. MT.
12*	45876	1	VALVE, 1-1/2 NPT, DRAIN,
13	38829	1	CHAIN, ELEVATOR, S35, 115-PITCH
14	40951	1	MASTERLINK, #35, SINGLE ROW, 3/8 PITCH
15	38827	1	COMPLETE BASKET LIFT ASSEMBLY

\* Not shown

9.6 *Basket Cover & Basket*

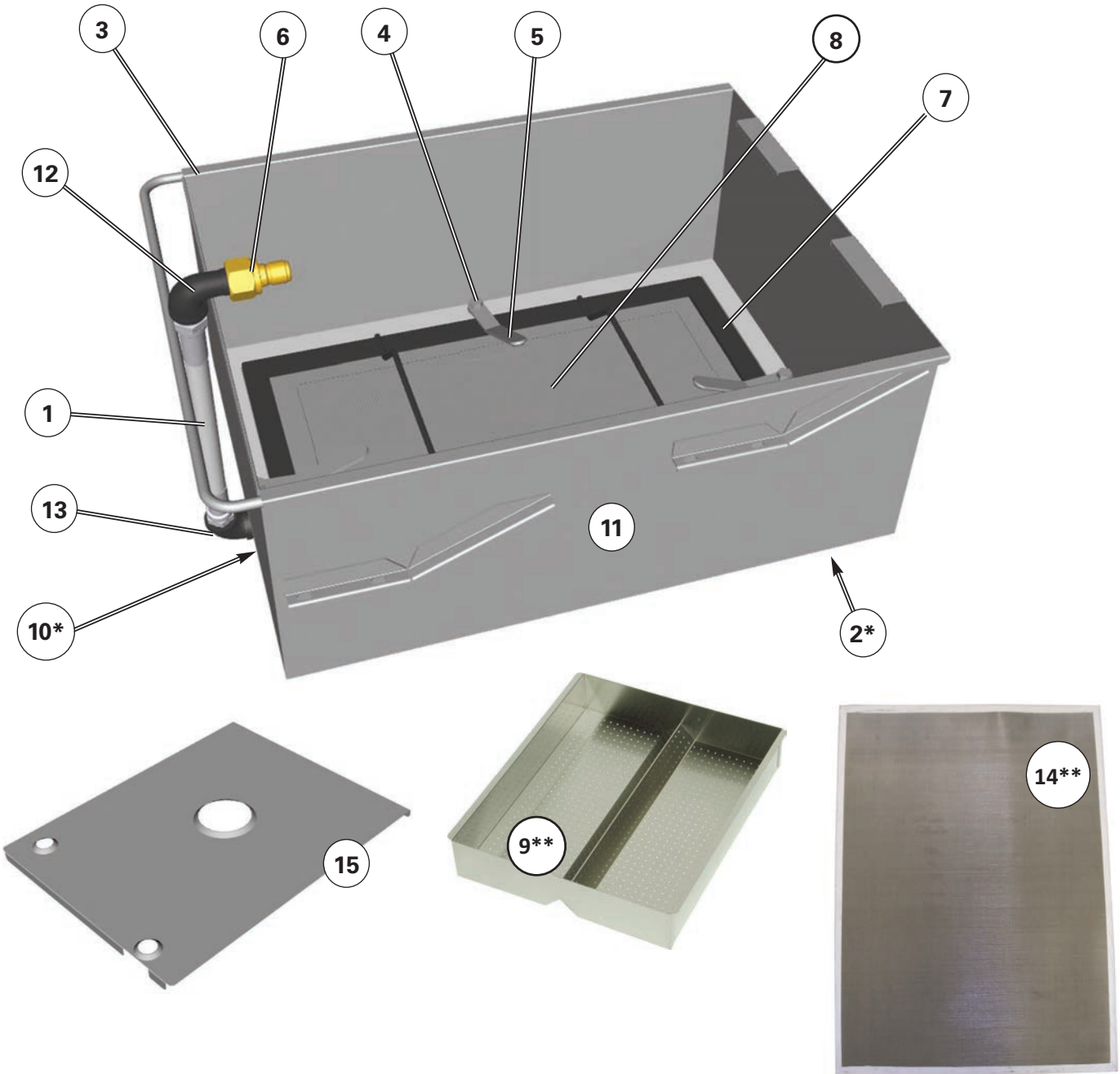


Due to continuing equipment improvements, some actual components may appear different than depicted in this Manual.

## 9.6 Basket Cover & Basket

Item	Part Number	Qty.	Description
1	33883	1	BASKET COVER, ASSY, GEF560/GEF720
	33884	1	BASKET COVER, ASSY, GEF400
2	38930	1	BASKET CARRIER, ASSY, GEF-720
	97132	1	BASKET CARRIER, ASSY, GEF-560
	39165	1	BASKET CARRIER, ASSY, GEF-400
3	91811	1	BASKET, GEF-720
	33703	1	BASKET, GEF-560
	33718	1	BASKET, GEF-400

9.7 Filter Pan Assembly



\* Not shown

\*\* Optional item, not included as standard



## 9.7 Filter Pan Assembly

Item	Part Number	Qty.	Description
1	40955	1	HOSE, 1/2NPT X 15.75
2*	40649	4	CASTER, SWIVEL, 2-9/16, FILTER PAN
3	38842	1	FILTER PAN WELD ASSEMBLY <b>(NOT COMPLETE, PAN ONLY)</b>
4	30040-4	4	STUD, FILTER PAN HOLD DOWN FRAME
5	38841	4	HANDLE, SUPPORT FRAME, FILTER PAN
6	44150	1	FITTING, BRASS,MALE,1/2NPT,QUICK DISCONNECT
7	38830	1	HOLD DOWN FRAME, WELD ASSEMBLY
8	60810	1	PAPER, FILTER MEDIA, 21.375 X 15.500 <b>(Sold as 100 ct Case)</b>
9**	39246	1	CRUMB SCREEN, FILTER PAN <b>(NOT INCLUDED, Purchased Separately)</b>
10*	40956	1	HOSE, 1/2NPT X 11.500 (underside of pan)
11	38834	1	COMPLETE FILTER PAN ASSEMBLY <b>(W/O CRUMB SCREEN)</b>
12	42250	1	ELL, 90-DEG, STREET, 1/2-NPT, BLACK PIPE
13	42200	1	ELL, 90-DEG, 1/2-NPT, BLACK PIPE
14**	41014	1	MESH FILTER SCREEN MEDIA, 15-3/8 X 21-1/4 <b>(OPTIONAL)</b>
15	95555	1	FILTER PAN COVER

\* Not shown

\*\* Optional item, not included as standard

9.8 Front Ventless Hood (GEF-VH Only)



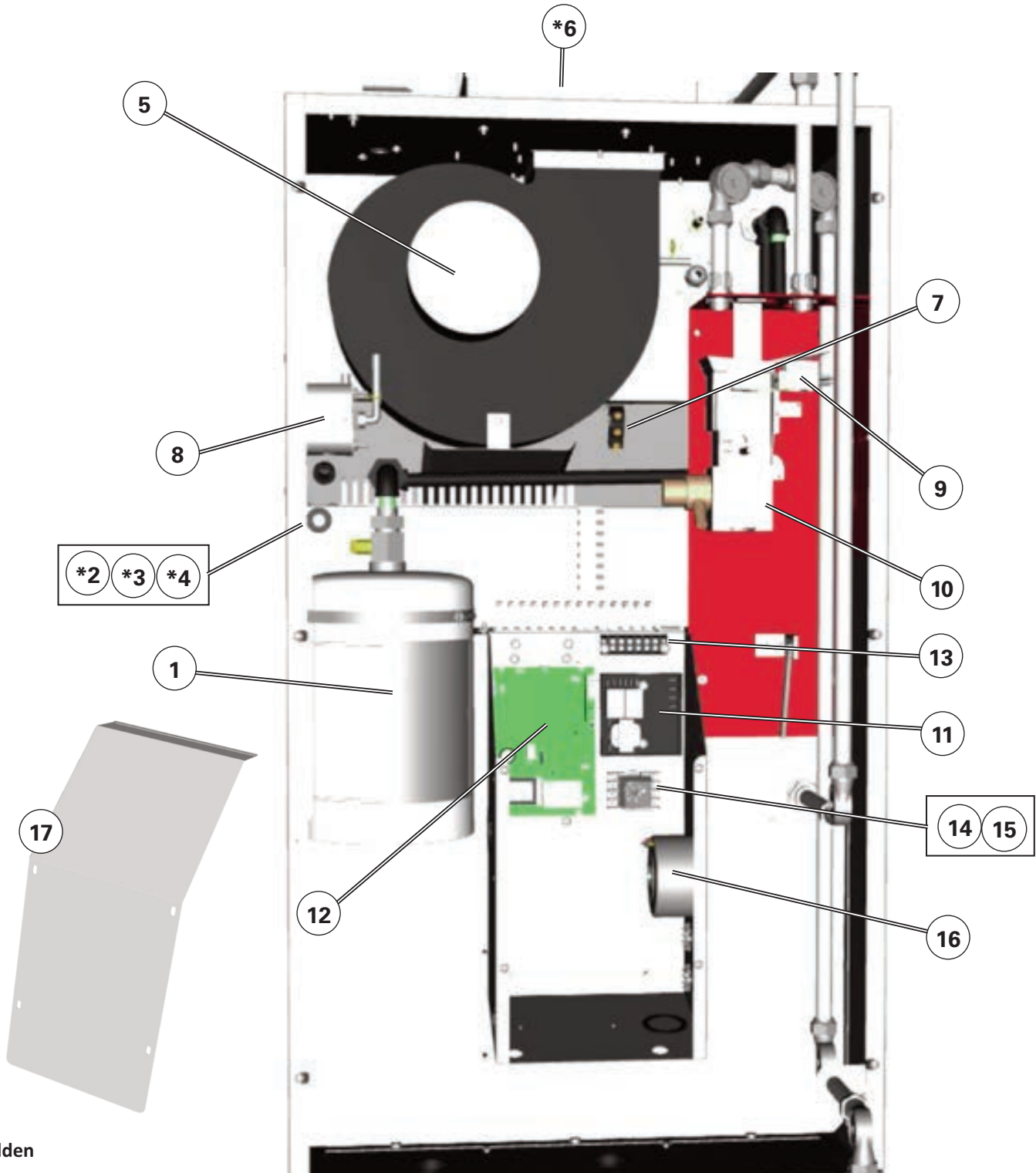
\* Not shown

## 9.8 Front Ventless Hood (GEF-VH Only)

Item	Part Number	Qty.	Description
1	90254	1	FILTER ACCESS PANEL, ASSY
2	30248	1	CHARCOAL, FILTER ASSY
3	20520	1	FILTER, EAC, 20 IN
4	42300	1	FILTER, BAFFLE, 20 X 20 X 2, SS
5*	23200	1	SWITCH, SNAP ACTION, ROLLER TYPE
6*	21125	1	BOARD, CONTACT, EAC, VH UNITS
7	30206	1	DRIP CUP, WELD ASSY
8	34750	1	PIN, DRIP CUP SAFETY

\* Not shown

**9.9 Rear Ventless Hood (GEF-VH Only)**



\* Hidden

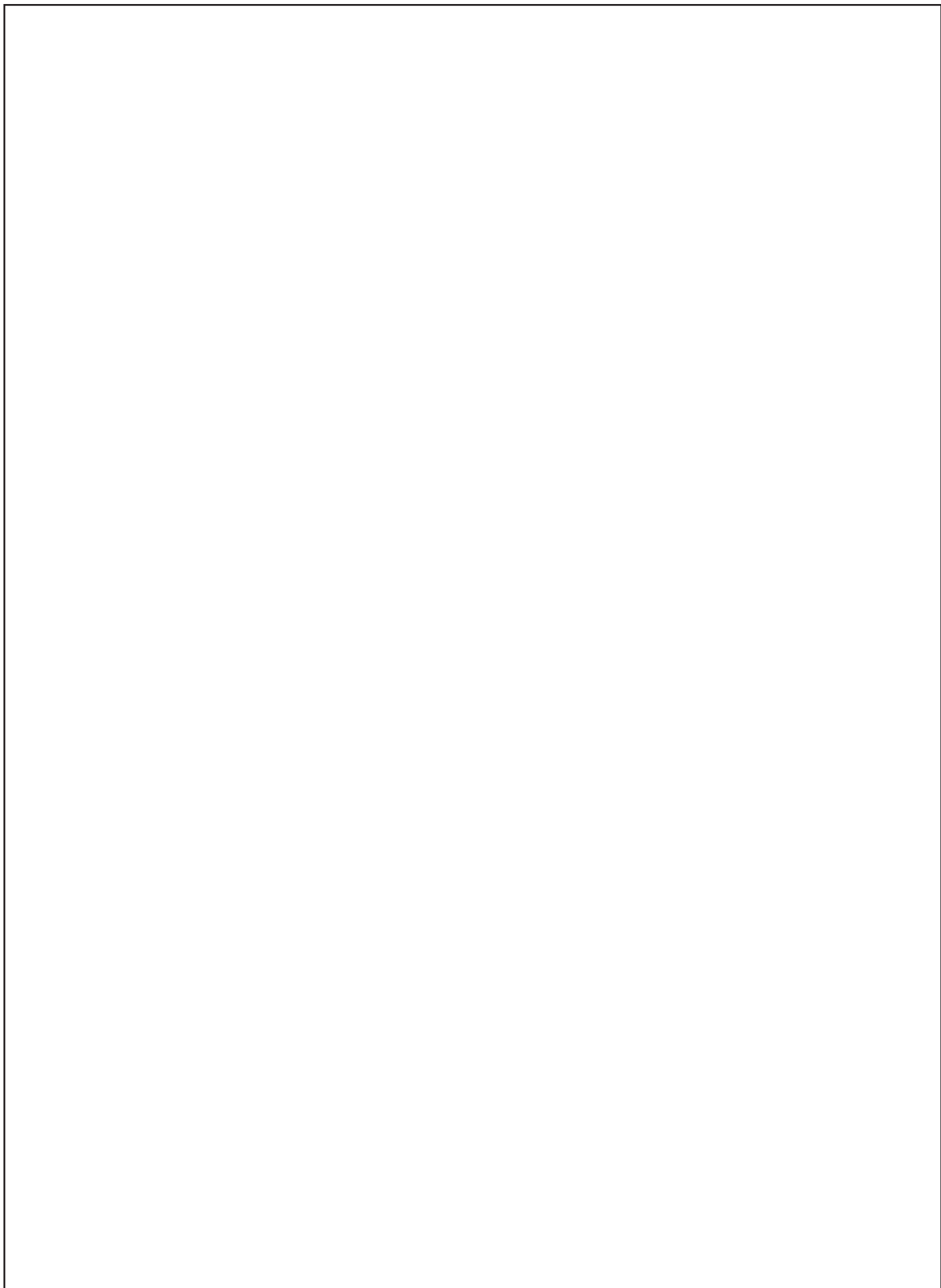
Due to continuing equipment improvements, some actual components may differ slightly from illustrations in this Manual.

## 9.9 Rear Ventless Hood (GEF-VH Only)

Item	Part Number	Qty.	Description
1	39272	1	TANK, ANSUL, 1.5-GAL SS
2*	23778	1	SWITCH, SIDE ROTARY, 240V, 30A, W/O ARM
3*	23779	1	ROD, ADJUSTMENT
4*	90054	1	ACTUATOR ARM, SWITCH, BAFFLE FILTER
5	33589	1	BLOWER, ASSY, VH-FRYERS
6	46125	1	DAMPER, FIRE, 10 X 10, 285 DEG LINK
7	24237	1	SWITCH, PLUNGER, 250V, 15A
8	20390	1	SWITCH, VACUUM, ADJUSTABLE
9	20002	1	SWITCH, ANSUL, SHUTDOWN/ALARM, 15A, 120V
10	40132	1	BRACKET & RELEASE, ANSUL, AUTOMAN
11	23776	1	MODULE, AIR FILTER, ALARM & SHUTDOWN
12	21296	1	POWER SUPPLY, EAC, W/DRIVER, 120V
13	23751	1	TERMINAL BLOCK, MA106
14	21101	1	SOCKET, RELAY, 8 PIN, 300V, 10A
15	21102	1	RELAY, 240VAC, DPDT, 10A, PLUG IN
16	21337	1	TRANSFORMER, 230VAC >115VAC @.86A
17	96760	1	COMPONENT BOX COVER

\* Hidden

**Notes:**







**Responsive. Reliable.**

P.O. Box 210247 • 2750 Gunter Park Drive West • Montgomery, AL 36121-0247 USA  
Phone 334.272.1457 • Toll-Free 800.554.4537 (USA & Canada Only) • FAX 334.239.4117 • [www.gfse.com](http://www.gfse.com)

Form No. 60831 (Rel. Jun.2003; Rev. Mar.2020, Rev. K)