

# Free Standing Ventless Hood

FSH-2 & FSH-2A-99

# **Operation & Service Manual**

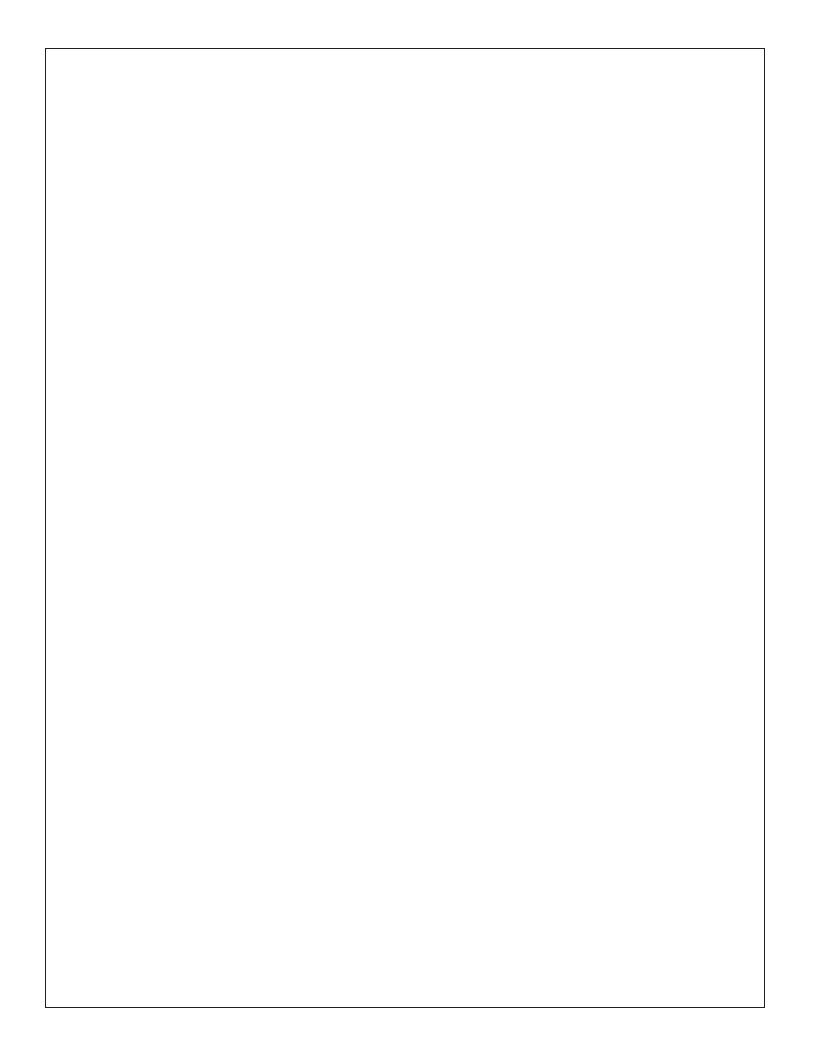


MODELS: FSH-2 FSH-2A-99

/! CAUTION: Read instructions before using this appliance.

#### **GILES Food Service Equipment**

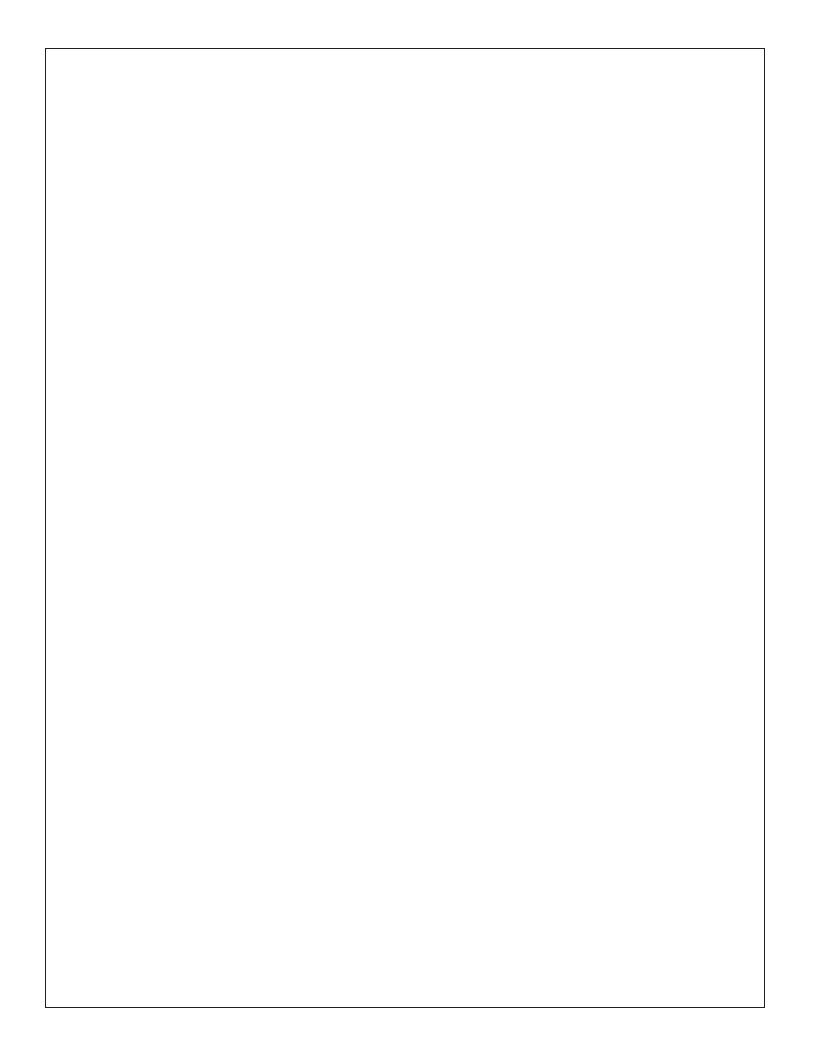
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### LIMITED WARRANTY

- 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 food service equipment or parts, or Giles food service equipment or parts not purchased from an authorized Giles representative, carry no warranties, express or implied.



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# Safety

### Safety Overview:

The information contained in this manual has been prepared to explain the proper procedures for safely installing, operating & maintaining your new *Giles Food Service Equipment*.

Throughout the manual, safety precautions are identified by hazard alert symbols & words such as **DANGER**, **WARNING** or **CAUTION**. Hazard information will precede 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 occurrence of a future event or condition.

These Hazard Alert Symbols are used to alert users to potential personal injury hazards and/or poor operating practices. They will immediately precede the precautionary measures for avoiding such hazards or practices. Adhere to all such information 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, aluminum, 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: <u>www.p65warnings.ca.gov</u>.

### **A** DANGER

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

### 

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

### ACAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor to moderate injury. Also used to alert for unsafe practices.

#### CAUTION

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.

# Safety

### Free Standing Ventless Hood FSH-2 & FSH-2A-99

### **Specific Safety Precautions:**

For your safety, please observe the following precautions when operating or servicing this equipment. Adhering to the following important safety information will help to prevent personal injury and/or damage to the equipment.

### 

- Before cleaning or performing maintenance, place **POWER** switch in the **[OFF]** position. To remove all power from the appliance, unplug power cord or turn OFF power at the main electrical panel.
- Failure to place **POWER** switch in the **[OFF]** position when replacing filters, could result in equipment damage, electrical shock and/or serious personal injury.
- DO NOT wash down interior or exterior of hood 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.

### 

- Ventless/recirculating hoods are <u>not</u> suitable for every commercial food service application. Failure to fully comply with all site requirements & installation limitations as outlined in the <u>GFSE Hood Approval Letter & this</u> <u>Manual</u>, may result in poor or highly unsatisfactory performance.
- <u>DO NOT</u> use ventless/recirculating hoods with gas-heated cooking appliances ... there is a high probability for inhalation hazard due to carbon monoxide build-up in the kitchen area. The hood is approved <u>ONLY</u> for use with electrically heated appliances.
- Prior to installation, consult a qualified electrician to ensure that installation will comply with all electrical requirements and codes. Check the rating label on the unit to determine proper power supply required. Have the electrician, or other qualified service technician, confirm that circuit breakers & wiring are of sufficient rating and gauge to power this equipment (wiring diagram is provided). The unit must be installed & electrically grounded in accordance with local codes, or in the absence of local codes, in accordance with the National Electrical Code, NFPA 70 ... improper or inadequate grounding may result in electrical shock to users.
- Improper installation, alteration of the unit, or improper service & 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!
- 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.



### **Specific Safety Precautions:**

### ACAUTION

- Exercise care when removing wooden crate framework & unit from shipping pallet. The unit is top-heavy & extreme care must be taken when moving the unit into position.
- Once located, be sure unit is properly leveled and anchored.
- <u>DO NOT</u> operate the appliance, unless you fully understand the function of all components & all operating procedures (refer to *Section 3*). Once you have read and fully understand *Section 3*, closely follow the instructions presented in this manual to avoid equipment damage or malfunction.
- The appliance is not intended to be used 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 use by a person responsible for their safety.
- When working in a kitchen environment, take necessary precautions to avoid injury from **HOT** cooking appliances, utensils, tools, etc. As applicable, always wear thermal protection, such as oven mitts or gloves, when handling hot pans, utensils or foods.
- 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

- Some components & controls are impact-sensitive. To avoid damage & maintain proper operation, exercise care when moving items and working near the hood.
- Handle the Electronic Air Cleaner (E.A.C.) cell carefully. <u>DO NOT</u> bend the collection plates (fins) or break the ionizer wires, as this will significantly reduce the performance of the air cleaning system and can eventually cause power to the cooking appliance beneath hood to be shutdown.
- <u>DO NOT</u> attempt to dry the E.A.C. cell after cleaning by installing it & running the hood. <u>NEVER PLACE A WET</u> <u>E.A.C. CELL INTO THE HOOD</u> ... doing so can potentially damage the system & cause improper operation. Such damage is NOT cover by the factory warranty.
- When cleaning the appliance:
  - DO NOT steam clean hood.
  - DO NOT clean with products containing chlorine, or other corrosive chemicals.
  - DO NOT use abrasive products, steel wool or scouring pads.
  - **DO NOT** use oven cleaner products.
- <u>DO NOT</u> alter, add attachments, or otherwise modify the equipment! <u>DO NOT</u> attach any type of ductwork extensions to the hood exhaust in an attempt to redirect airflow.
- Failure to comply with CAUTION notices may result in damage to equipment or property. Such damages are NOT covered by the factory warranty.



#### **Specific Safety Precautions:**

#### NOTE:

- When received, If damage to the shipping pallet is evident, immediately and thoroughly inspect the equipment & accessories. Notify the freight company of damages. Generally, negotiating freight damage claims shall be the responsibility of the purchaser.
- Comply with all appropriate state and/or local heath regulations regarding cleaning & sanitation of food service equipment.
- To clean difficult surface areas, having excessive build-up of grease residue, *GILES* recommends using a mild, biodegradable, non-toxic degreasing cleaner such as *Simple Green® Crystal Foaming Spray Degreaser/Cleaner*.
- GILES assumes no responsibility in regard to code compliance for installation and use of ventless recirculating ventilation equipment. Prior to installation, the customer is responsible for obtaining all necessary approvals from local Authorities Having Jurisdiction (AHJ) pertaining to use of the equipment.

# Introduction

### Free Standing Ventless Hood FSH-2 & FSH-2A-99

### 1. Introduction

Thank you for purchasing a new *GILES* Free Standing Ventless Recirculating Hood, *Model FSH-2 or FSH-2A-99* manufactured by Giles Enterprises, Inc., Montgomery, Alabama (USA), hereafter referred to as "*Giles*". Giles ventless hood technology is the result of extensive research, development & engineering. Every unit is thoroughly inspected & tested prior to shipment to ensure it will operate flawlessly after installation. With proper care & maintenance the equipment should provide years of trouble-free service.

The hood is listed for use with fryers & pressure fryers, to remove grease-laden cooking vapors from the air, as well as help to control objectionable odors which may be generated while cooking. It utilizes an electronic air cleaner (E.A.C.) system, which electrically charges grease particulate in the air stream, then electrostatically captures it on collection plates as the air passes through the collector cell. An activated charcoal filter provides a final filter stage to help control cooking odor in the recirculated air.

To help protect your investment, we recommend taking a few moments to read this manual & familiarize yourself with proper installation, cleaning & maintenance procedures. Adhering to these recommended procedures minimizes the potential for costly downtime & equipment repair.

#### Please retain this manual for future reference.

#### 1.1 Construction

Constructed of high-grade, formed & welded stainless steel sheet metal.

#### 1.02 Standard Features

**<u>Three Stage Filtration</u>**: Three (3) different filter systems remove particulate & grease-laden vapor from the air stream.

**Extinguishing System**: Built-in *Ansul® R-102* fire extinguishing system protects against accidental fire in the cooking appliance underneath the hood. *Final field set up, charging & commissioning of the system is the responsibility of the purchaser and must be provided by an authorized Ansul® dealer.* 

- **EAC Cleaning Timer**: The system notifies user that it is time to clean the Electronic Air Cleaner (E.A.C.) collector cell. **DAILY** cleaning is important to maintain peak air cleaning performance. If the cell is not cleaned in a timely manner, the timer will shutdown the hood which also disables power to the interlocked cooking appliance, preventing further operation cleaning is performed.
- **Push-To-Start Power:** Hood & appliance will not automatically restart when power is restored after an interruption. **POWER** switch must be pressed again to start. Complies with code requirements in some jurisdictions.

### 1.03 Optional Features

Appliance Receptacle:Built-in, interlocked, NEMA 15-50R power receptacle for the cooking appliance. Plug appliance<br/>power cord directly into hood ... can help minimize on-site installation work. Maximum<br/>appliance load = 50 amps.

**HEPA Filter Model**: Features a replaceable HEPA filter instead of the standard sustainable Electronic Air Cleaning system.

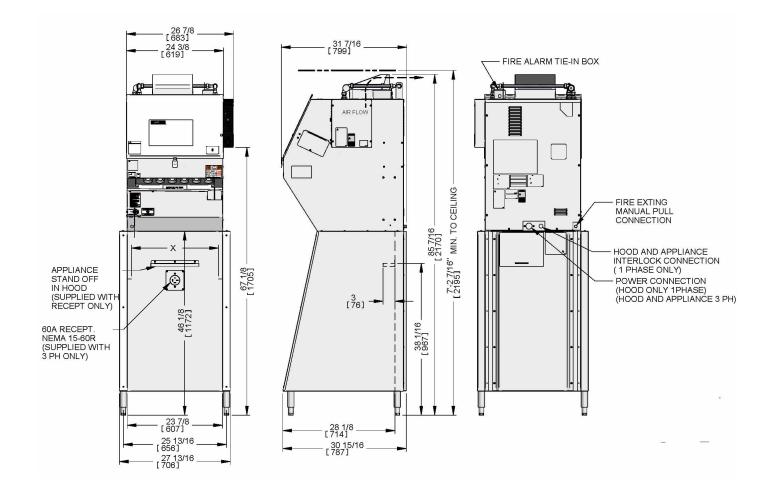
# Introduction

# Free Standing Ventless Hood

FSH-2 & FSH-2A-99

1.04 Specifications

1.04.1 Overall Dimensions: FSH-2



**INCHES** [mm]

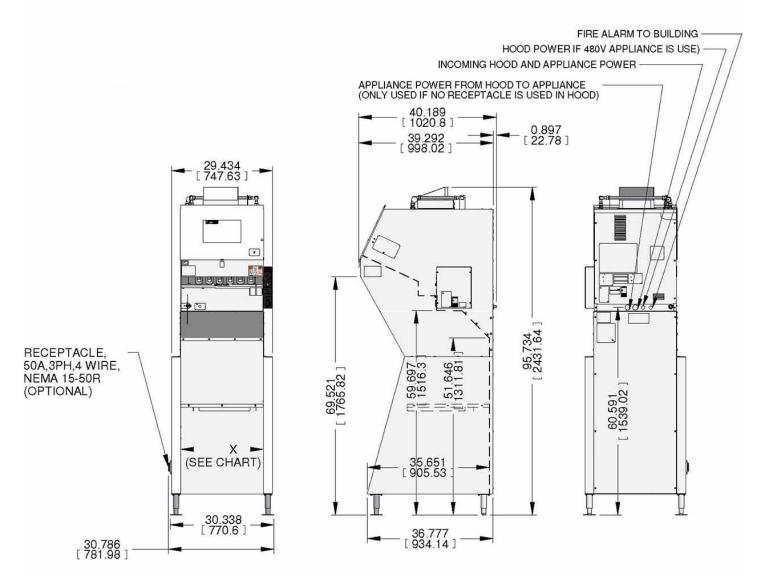
DOCKING OPENING WIDTH "X"			
BRACKET LETTER DES- IGNATION	INCHES [mm]		
А	24 [610]		
В	20-1/8 [511]		
С	18-5/8 [473]		
D	16-1/8 [410]		
E	15-5/8 [397]		
F	15-1/8 [384]		
G	14-1/8 [359]		
Н	10-1/8 [257]		

# Introduction

# Free Standing Ventless Hood

FSH-2 & FSH-2A-99

1.04.2 Overall Dimensions: FSH-2A-99



**INCHES** [mm]

DOCKING OPENING WIDTH "X"			
BRACKET LETTER DES- IGNATION	INCHES [mm]		
А	24 [610]		
В	20-1/8 [511]		
С	18-5/8 [473]		
D	16-1/8 [410]		
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F	15-1/8 [384]		
G	14-1/8 [359]		
Н	10-1/8 [257]		

# Free Standing Ventless Hood

FSH-2 & FSH-2A-99



Agency Certifications



**CE** HEPA filter versions ONLY

### 1.06 Unit Weight

Model	Weights	
Model	Crated - Ibs [kg]	Uncrated - lbs [kg]
FSH-2	405 [184]	327 [148]
FSH-2A-99	595 [270]	495 [225]

### 2. Installation

The following sections summarize procedures for proper equipment installation. To help avoid damage to the equipment or personal injury, be sure to adhere to all of these installation instructions.

Equipment installation is the sole responsibility of the purchaser. It is advisable to engage the services of professional commercial kitchen equipment specialists, licensed electricians, and qualified HVAC contractors to assist with the details of installation. If necessary, *Giles Technical Support* @ 800.554.4537 is available for assistance.

### 2.01 Appliance Location

#### **IMPORTANT!!**

Before installing a *GILES* Recirculating/Ventless Hood system ensure that ... A). All necessary approvals have been obtained from local code authorities ... B). The appliance to be placed under the hood is within the hood's listing limitations, as outlined in <u>Section 2.04</u> ... C). The installation site complies with the specific requirements & limitations outlined in the <u>GFSE Recirculating/Ventless Hood Approval Letter (HAL)</u>. The <u>HAL</u> is available for review & download at <u>www.gfse.com</u> on the <u>SUPPORT</u> menu under <u>VENTLESS DOCUMENTS</u>.

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

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

### ACAUTION

- DO NOT ALTER, ADD ATTACHMENTS OR OTHERWISE MODIFY THE EQUIPMENT.
- Failure to comply with installation requirements as specified by the <u>Giles Hood Approval Letter</u> will void the factory warranty.
- 1. Before unpacking, review dimensions & clearances shown in *Section 1.04.1* or *1.04.2* and determine whether the selected installation location is suitable.
- 2. Keep the unit and the surrounding area free & clear of combustible materials.
- 3. Do not obstruct the area around the exhaust outlet on top of hood. No minimum clearance (0") is required between the top of the exhaust diverter & ceiling, but it is advisable to have some space to allow for easy movement should the hood need to be moved in the future.
- 4. Provide adequate space for future servicing & proper operation.
- 5. Hood is equipped with adjustable leveling legs. After final positioning, adjust the legs so that the unit is level, side to side, front to back & corner to corner.
- 6. Before operating, make sure the unit is secured in position and will not move. The front legs of a *FSH-2A-99 Hood* have foot plates for securing the unit to the floor.

### Free Standing Ventless Hood FSH-2 & FSH-2A-99

### 2.02 Unpacking

#### **IMPORTANT NOTE!!**

If the palletized unit had signs of damage, the equipment and all packed accessories should have immediately been inspected and the freight company promptly notified of the damages. *Typically, it is the customer's responsibility to negotiate freight damage claims.* 

### **A**CAUTION

- These hoods are heavy & somewhat top-heavy! Exercise due caution when handling to avoid personal injury or damage to the equipment. Take precautions necessary to avoid damaging the hood stand or legs.
- Exercise care when removing the protective wooden framework from around the unit to avoid exposed nails or staples.
- Failure to comply with these **CAUTION** notices may result in minor to moderate injury, damage to equipment or property, and void the warranty.

Unit is shipped on a wooden pallet, secured with high-tensile plastic strapping & wrapped with machine-applied stretch film. A wooden crate framework is built around the unit for added protection. Unpack unit as follows:

- 1. Position the load in an area that provides adequate space for unpacking activities.
- 2. Remove the plastic stretch wrap, strapping & other packaging materials, as necessary.
- 3. Carefully remove attached wooden supports and/or crate framework.
- 4. A carton containing the empty 1-1/2 gal. wet chemical suppressant tank is generally secured on top of the hood. Locate this carton & retain for safe keeping ... it will be needed by the Ansul Service Technician when completing field set-up of the fire suppression system.
- 5. To avoid damage, unit is shipped without the adjustable legs installed. The legs are packaged in a separate carton ... be sure to secure & retain, see *Adjustable Leg Installation* below.
- Carefully remove the unit from the shipping pallet. The hood is very heavy & somewhat top-heavy, see Section 1.06, Unit Weight. Great care should be taken when lifting or moving the unit to avoid personal injury or equipment damage.

### Adjustable Leg Installation

- 1. Obtain the adjustable legs. *Model FSH-2A-99: Two (2) legs have floor anchor plates & two (2) are standard*.
- 2. With appliance resting on a stable surface, have two helpers tilt the unit forward & hold.
- 3. Install the two (2) rear legs (*standard*) into threaded holes on bottom of stand sides, screw in clockwise until hand tight. *Take care not to cross-thread* ... leg should turn fairly easy until tight.
- 4. Have helpers tilt unit backward onto the installed rear legs, giving access to front of stand. Repeat the process for two (2) front legs w/foot plates.

### 2.03 Electrical Specifications (Hood Only)

### 

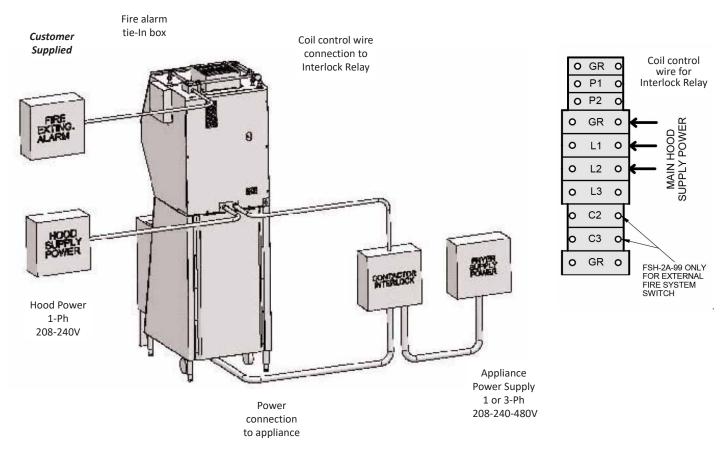
- Food service equipment must be properly grounded in accordance with local code, or in the absence of local code, with the <u>National Electrical Code, ANSI/NFPA 70</u>. Improper grounding may result in electrical shock to users. Check local electrical code to ensure proper grounding.
- Consult a certified electrician, or other qualified service technician, to confirm that the available electrical circuit is of sufficient rating to power the hood & cooking appliance load.
- Improper installation, adjustment, alteration, service & maintenance could result in serious injury, even death, equipment or property damage and could void the factory warranty.

Hood Electrical Requirements (Hood Only)					
Unit	Voltage	Hz	Phase	Amps	Breaker
FSH-2	208-240	60	1	5	10
FSH-2A-99	208-240	60	1	5	10

Actual required breaker size depends on hood configuration and the electrical load of any appliance when connected through the hood circuit. Breaker size shown above applies for a separate hood power supply ONLY.

#### 2.03.1 Electrical Connections

Figure 2.03.1-A: Model FSH-2, 1-Ph Hood ... Appliance Powered Separately (208-240-480V/1 - 3-Ph) through an external appliance interlock relay

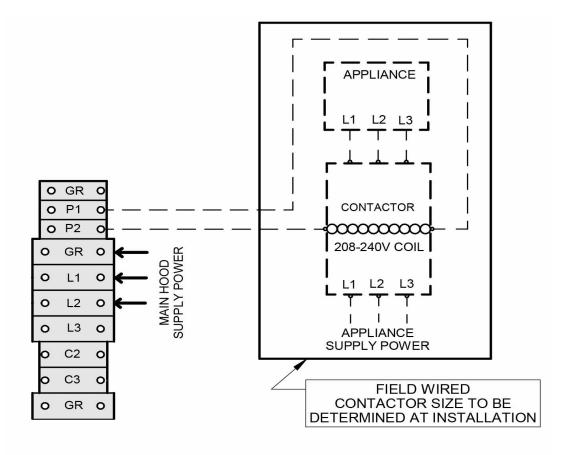


# Free Standing Ventless Hood

FSH-2 & FSH-2A-99

#### 2.03.1 Electrical Connections - continued

Figure 2.03.1-B: Model FSH-2, 1-Ph Hood ... Separate external appliance interlock relay

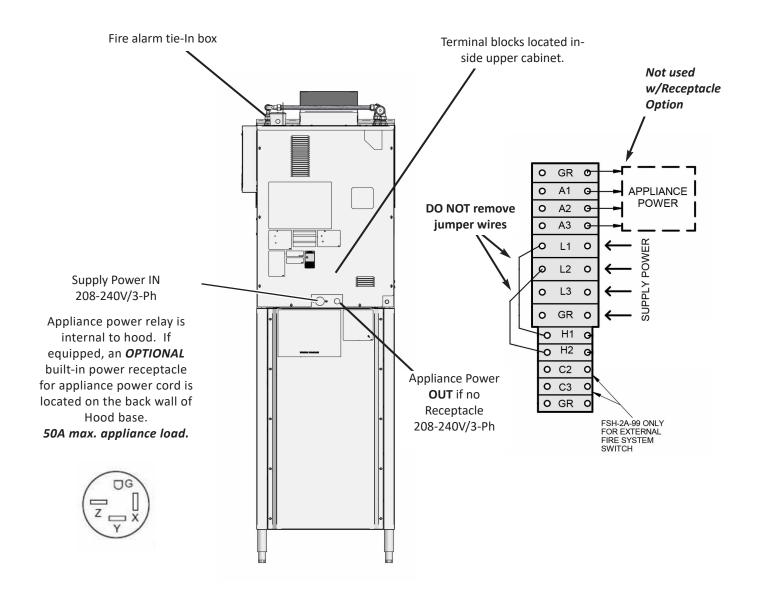


- 1. A 1-phase **FSH-2 Hood** requires a separate, field installed, interlocking circuit with an appropriately sized contactor, connected as shown by this diagram. **Customer supplied.**
- Remove upper rear panel to access terminal blocks for coil control wiring (P1, P2). Attach appropriate conduit at cutout in bracket & route control wiring to the *customer supplied* appliance interlock relay enclosure. Allow enough conduit and wire so the hood can be accessed for cleaning and servicing.
- 3. Make appropriate connections for appliance power as indicated by diagram.
- 4. Reinstall hood back panel.

### Free Standing Ventless Hood FSH-2 & FSH-2A-99

#### 2.03.1 Electrical Connections - continued

*Figure 2.03.1-C: Model FSH-2, 3-Ph Hood & Appliance on Same Power Supply, 208-240V ... Appliance Receptacle Option if equipped.* 

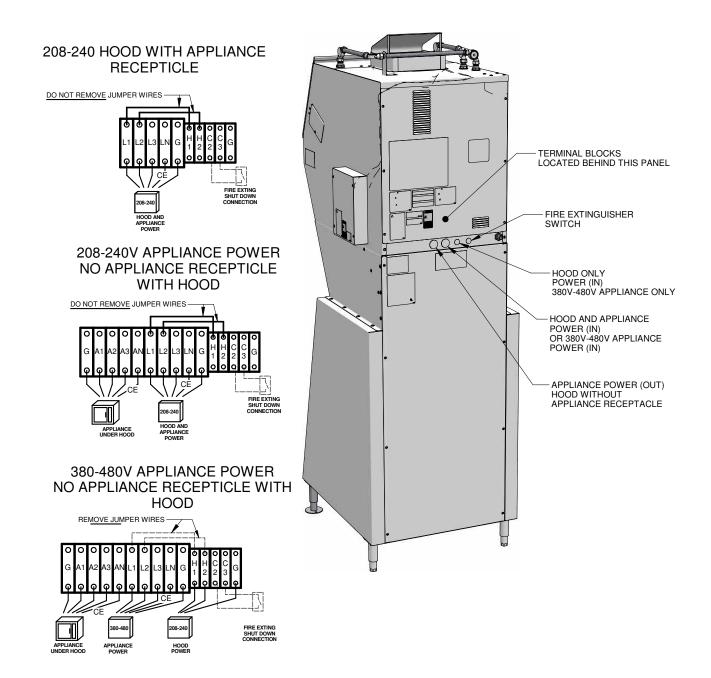


# Free Standing Ventless Hood

FSH-2 & FSH-2A-99

#### 2.03.1 Electrical Connections - continued

Figure 2.03.1-D Model FSH-2A-99



### 2.03.2 Hood Power Connection

#### **IMPORTANT!**

Electrical installation materials (breakers, conduit & fittings, wire, etc.) and labor shall be provided by the customer. Work should be performed by a qualified professional electrical contactor.

Installation must comply with all local code requirements. Giles assumes no responsibility with respect to code compliance regarding installation & use of this equipment.

#### Model FSH-2: See Figures 2.03.1-A ... 2.03.1-B ... 2.03.1-C

- 1. Install appropriate circuit breakers in main electrical panel for hood power. See *Section 2.03*. for required circuit breakers. Breaker size given is for the hood only.
- 2. Remove upper hood back cover & inside electrical box cover. Route appropriate size conduit from panel and attach with proper connectors at conduit cutout in bracket. Pull proper size wire from electrical panel and attach to terminal blocks in hood service box. Allow sufficient length of wire & conduit to provide slack needed to properly access unit for cleaning & service.
- 3. **For hood with optional Appliance Receptacle installed**, simply plug power cord from appliance into receptacle inside hood base, located on back wall. **Maximum appliance load = 50A.** It may be necessary to change, or install, the appliance power plug **(not provided, customer supplied)**.
- 4. **For hood without appliance receptacle installed**, attach power cord, or wiring, from appliance to terminal blocks **[A1,A2,A3,G]** and route through cutout using appropriate strain relief connector or conduit. **Maximum appliance load = 50A.**
- 5. Reinstall inside service cover & hood back panel.

#### Model FSH-2A-99: See Figure 2.03.1-D

- 1. Install appropriate circuit breakers in main electrical panel for hood power. See *Section 2.03*. for required circuit breakers. *Breaker size given is for the hood only*.
- 2. Most *FSH-2A-99* models have an interlocked power receptacle for the appliance, located on the left hood base leg, or on the rear panel. When installing a hood with the appliance power receptacle, the breaker size shall be determined by the electrical load of the appliance being placed under the Hood *(Max. load = 50A).*
- 3. Remove the upper rear panel to access terminal blocks. Remove one of the large hole plugs and install an appropriate conduit connector. Route appropriately sized flexible conduit and wire from the electrical panel supplying hood power. Allow sufficient length of wire & conduit to provide slack needed to access unit for cleaning & service.
- 4. For hood with optional Appliance Receptacle installed, simply plug power cord from appliance into receptacle inside hood base, located on back wall. Maximum appliance load = 50A. It may be necessary to change, or install, the appliance power plug (not provided, customer supplied).
- 5. For hood without appliance receptacle installed, attach power cord, or wiring, from appliance to terminal blocks [A1,A2,A3,G] and route through cutout using appropriate strain relief connector, or conduit. Maximum appliance load = 50A.
- 6. Reinstall inside service cover & hood back panel.

### Free Standing Ventless Hood FSH-2 & FSH-2A-99

#### 2.03.3 Equipotential Bonding



An equipotential bonding lug is provided so that hood can be electrically bonded to the equipment being operated under it and/or to other pieces of equipment being operated in the same workspace. The purpose is to minimize the possibility of a potential difference between two pieces of equipment that could result in electrical shock or electrocution of persons who might possibly touch two pieces of equipment at the same time.

#### 2.03.4 Fire Alarm Connection

Allows for connection of the fire suppression switch to the building fire alarm control system so that any activation of the extinguishing system will activate the facility fire alarm.

- 1. *Model FSH-2* connection is made inside the tie-in junction box on top of hood.
- 2. *Model FSH-2A-99* connection is made at terminal blocks *C2 & C3* located in the hood's electrical component box inside the upper rear panel.
- 3. Remove necessary cover or rear panel, make secure connection using wire nuts and replace covers.

#### 2.04 Limitations & Clearances

The following explains various limitations & required clearances for appliances to be placed underneath the hood. **FSH-2 & FSH-2A-99** ventless recirculating hoods are only listed for use with **electric fryers** that comply with the following limitations.

<u>ONLY</u> electrically heated fryers may be used ... Gas heated or equipment not meeting the specifications below are not approved.

These hoods can be used with <u>ELECTRIC FRYERS ONLY</u>... <u>USE WITH GAS FRYERS IS NOT AP-</u> <u>PROVED!!</u> and can create an inhalation hazard due to carbon monoxide build-up.

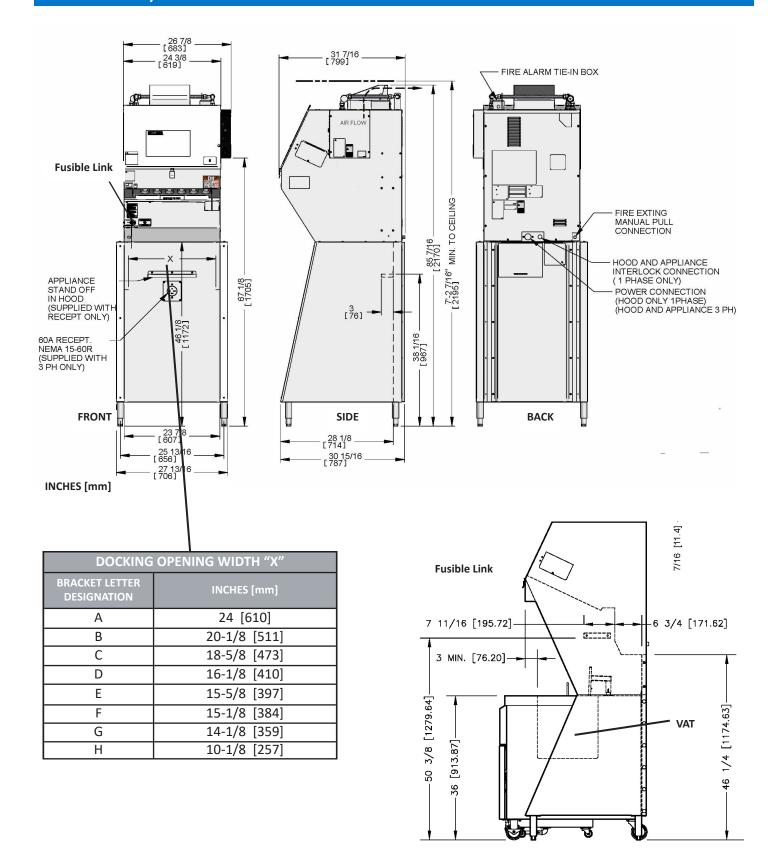
#### 2.04.1 Fryer Limitations

Model	Max. Fryer kW	Max. Shortening Capac- ity lbs [kg]	Max Cooking Surface sq in [sq m]
FSH-2	20	110 [49.9]	380 [.25]
FSH-2A-99	20	110 [49.9]	380 [.25]

# Free Standing Ventless Hood

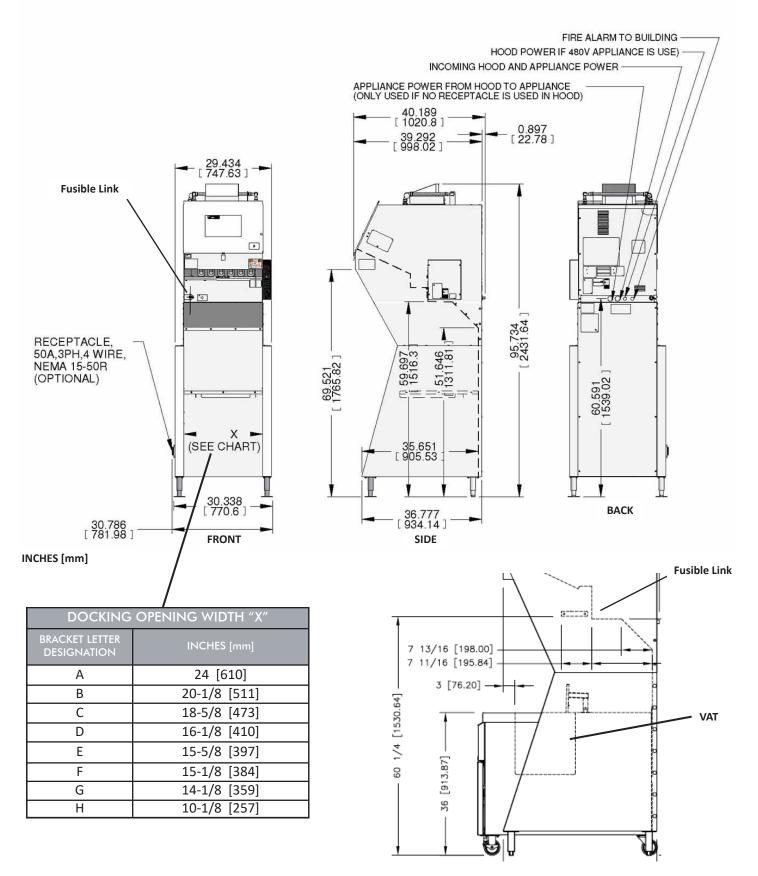
FSH-2 & FSH-2A-99

2.04.2 Fryer Clearance: FSH-2



### Free Standing Ventless Hood FSH-2 & FSH-2A-99

#### 2.04.3 Fryer Clearance: FSH-2A-99



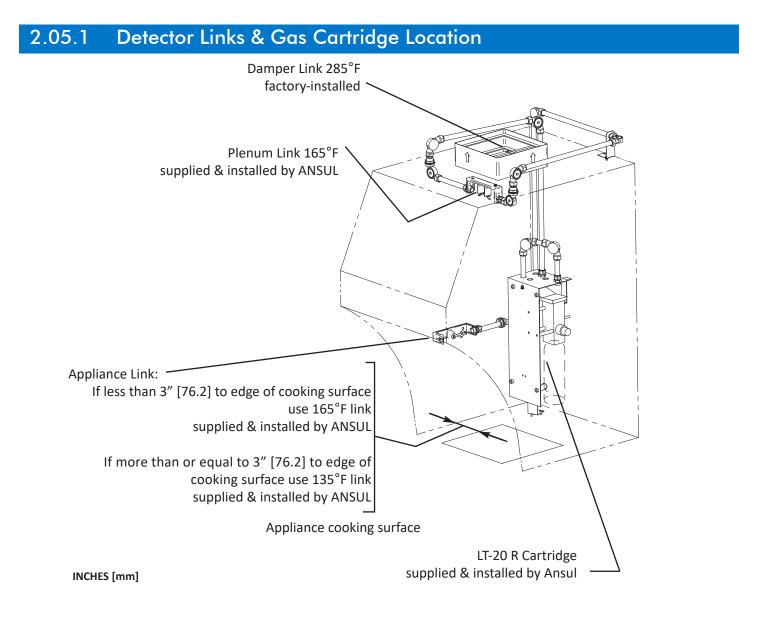
### Free Standing Ventless Hood FSH-2 & FSH-2A-99

#### 2.05 Fire Suppression System

The fire suppression system in *Giles Ventless Hood* is an **ANSUL® R-102 Restaurant Fire Suppression System (Standard UL-710B Listed)**. Final field set-up, charging, certification & arming of the system must be performed by an authorized Ansul® distributor/dealer in accordance with the system listing.

The fire suppression system is designed & UL-listed to provide fire protection for cooking appliances, such as fryers. It is a mechanically activated system that automatically provides continuous protection. The factory-installed system includes piping, nozzles (appliance & plenum), Automan release mechanism, detector link brackets, conduit for link cabling, exhaust outlet fire damper and a 1-1/2 gal. stainless steel wet chemical tank.

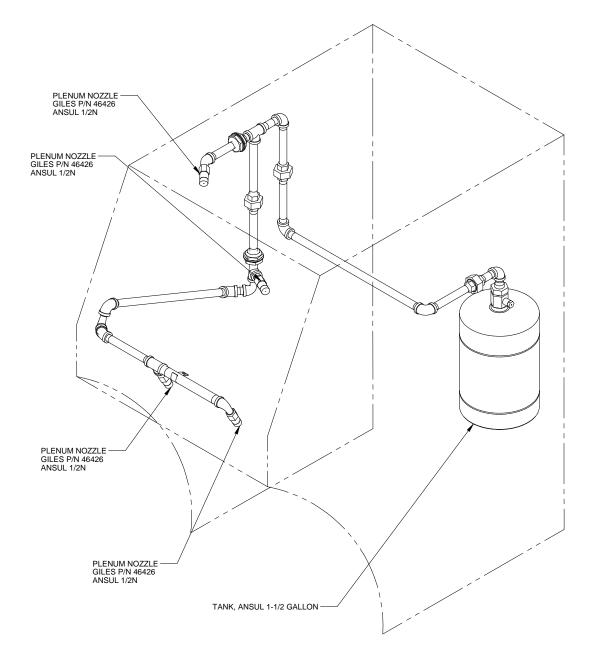
Field set-up by an Ansul agent includes, but may not be limited to, installation of proper fusible detector links & wire cable, filling & installing the suppressant tank, installing a remote manual activation station, installing a compressed gas discharge cartridge, testing, certifying & arming the system. *Parts & labor necessary for the system field set-up is the sole responsibility of the customer ... not included with hood purchase*.



### Free Standing Ventless Hood FSH-2 & FSH-2A-99

### 2.05.2 Fire Extinguisher Nozzles & Tank Location

All nozzles are factory-installed & aligned in the proper operating position. DO NOT MOVE OR ADJUST.

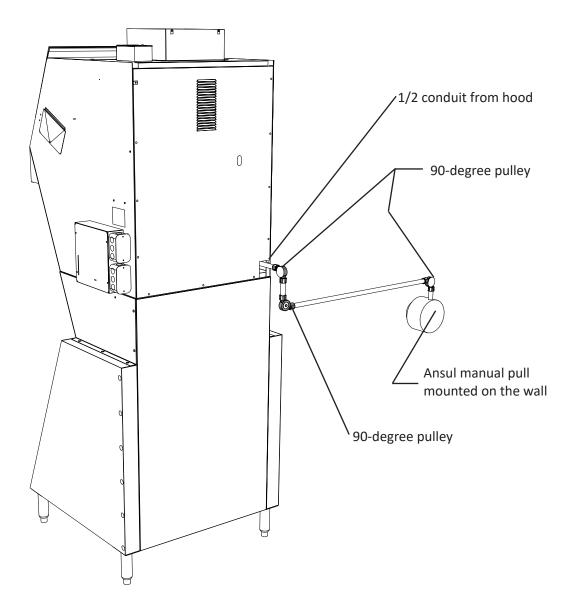


### Free Standing Ventless Hood FSH-2 & FSH-2A-99

### 2.05.3 Remote Manual Activation Station (Customer Supplied)

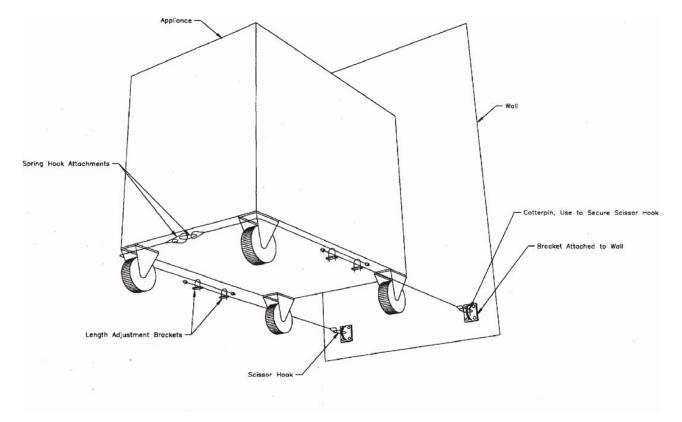
Hood requires use of the ANSUL<sup>®</sup> R-102 Standard for a Manual Activation System. The manual pull station must be conspicuously mounted near a path of egress & connected to the hood such that the fire extinguishing system can be manually actuated from the remote location. It is to be supplied & installed by an authorized Ansul agent *(customer provided)*.

The following illustration depicts the typical installation. This basic configuration allows the hood to be moved away from the wall for cleaning & servicing without removing the manual pull from the wall, or accidently causing the system to discharge.



### 2.06 Restraining Device (Customer Supplied)

The fryer placed under this hood must be secured so that it cannot move from under the hood. The following diagram shows an example of a typical suitable restraining device. It must be appropriate for the appliance being used & will vary depending on the make & model of fryer. *Restraining device is <u>not</u> supplied with the hood*.



**Note:** Be sure to maintain minimum & maximum clearances (see Section 2.04.2 or 2.04.3 after the Restraining Device is installed.)

### Free Standing Ventless Hood FSH-2 & FSH-2A-99

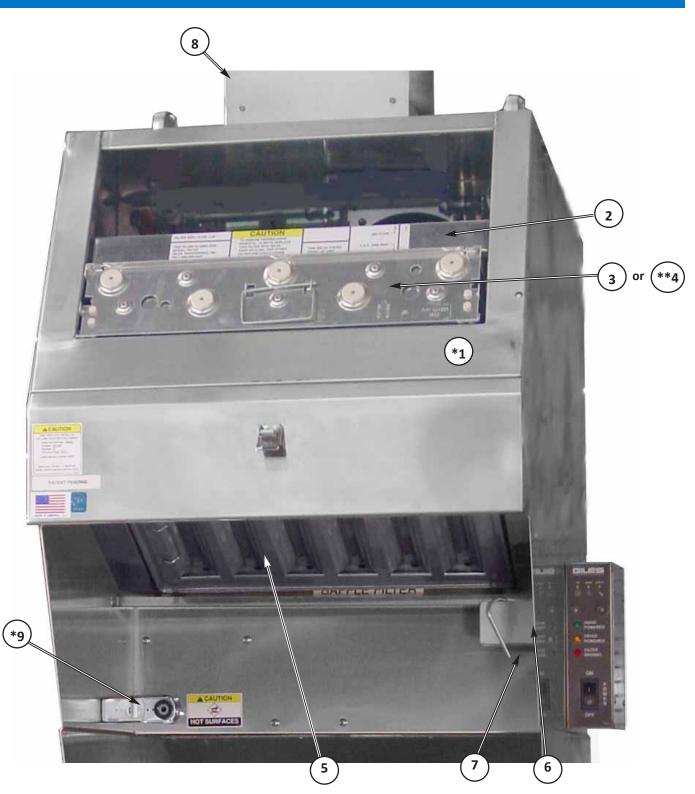
### 3. Overview

The following provides a brief overview of the components, functions & accessories associated with the *Free Standing Ventless Hood, Model FSH-2, FSH-2A-99*. Please review this section carefully before proceeding further.



# Free Standing Ventless Hood FSH-2 & FSH-2A-99

Filter Chamber & Hood Front 3.01



## Free Standing Ventless Hood FSH-2 & FSH-2A-99

### 3.01 Filter Chamber & Hood Front

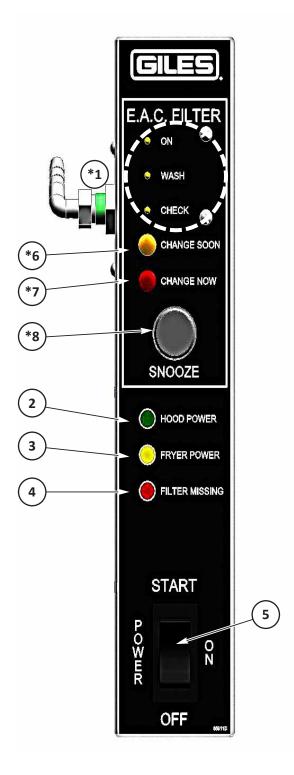
Item	Description	Function			
*1	Filter Access Cover	Provides access to the filter chamber & plenum area. Hood will not operate unless the cover is in place & properly latched.			
2	Charcoal Filter	<ul> <li>Helps to control undesirable aromas generated during cooking. It should be replaced monthly (approx). <u>DO NOT</u> <u>attempt to clean filter</u>. To avoid lost time, keep a spare filter (Giles #30248) for quick exchange.</li> <li><u>NO FILTER COMPLETELY ELIMINATES COOKING ODOR</u>.</li> </ul>			
3	Electronic Air Cleaner (E.A.C.) Collector Cell	The E.A.C. system is an electronic air cleaner that electrostatically captures grease-laden vapor & smoke particulate generated by cooking. <b>Power must be turned</b> <b>OFF before removing the EAC cell for cleaning. To</b> maintain best air cleaning performance, the cell must be cleaned daily. Fryer under hood is disabled if EAC cell is missing, excessively dirty, or experiencing other faults.			
**4	HEPA Filter <b>(CE or Optional)</b>	<i>CE listed models or as option</i> : EAC system is replaced by a high-efficiency <i>HEPA Filter</i> . The filter <u><i>CANNOT</i></u> be cleaned & must be replaced periodically to maintain acceptable performance. Fryer under hood is disabled if the HEPA filter is missing or clogged. The HEPA filter is installed in reverse of the illustration charcoal filter is placed below the HEPA filter.			
5	Baffle Filter	First stage of the air cleaning system. Easily removed for daily cleaning. To prevent contact with electrical parts & avoid electrical shock, <u>DO NOT</u> remove the baffle filter while hood is powered.			
6	Grease Drip Cup	Captures & collects grease condensate generated by the baffle filter. It should be cleaned daily, or as needed.			
7	Grease Drip Cup Safety Pin	Secures the grease drip cup to prevent it from uninten- tionally falling from the holding bracket.			
8	Exhaust Air Diverter	Diverts hood exhaust air to the sides & rear. Allows for operation of the unit in spaces with lower ceiling heights.			
9	Appliance Detector Link	Detects fire in the fryer & trips the fire extinguishing system. Take care not to hit or bump the link doing so may cause the fire extinguishing system to inadvertently discharge.			

# Free Standing Ventless Hood

FSH-2 & FSH-2A-99

#### 3.02 Control Box with Timer

NOTE: Timer feature is NOT included on FSH-2 Models.



\*Not present on HEPA Filter Models

### 3.02 Control Box with Timer

ltem	Description	Function
	E.A.C. Filter Status Indicators [ON] [WASH]	LED light cluster indicates status of the Electronic Air Cleaner (E.A.C.) system.
		<b>[ON]</b> - Turns ON when hood is powered-up. Indicates that the E.A.C. system is powered & functioning normally to clean the air. This is the only light ON when operating normally.
*1		<b>[WASH]</b> - Indicates excessive grease film build-up on collector fins (dirty), collector cell is missing, poor connections, missing ionizer wires, etc. Approximately 2 minutes after this light turns ON, a beeping tone alarm sounds & power to fryer is shutdown.
	[CHECK]	IMPORTANT! Do not rely on this indicator as a signal for routine cleaning cell must be cleaned daily to maintain peak performance & extend useful life of charcoal filters.
		<b>[CHECK]</b> - Indicates that collector cell has stopped operating properly damaged & shorted to ground, fins are shorted due to excessive moisture, etc. No alarm sounds & the fryer remains powered, but electronic air cleaning is not functioning. <i>Discontinue operation &amp; inspect.</i>
2	HOOD POWER	Indicates that hood is powered and running.
3	FRYER POWER	Indicates that power is being supplied to the fryer under the hood.
4	FILTER MISSING	Indicates that baffle and/or charcoal filter is missing or improperly installed. <i>HEPA filter if applicable</i> .
5	Power Switch <b>PUSH-TO-START</b>	Turns hood power ON and OFF. When hood fan is running sufficiently to provide capture, power is supplied to the fryer. To start, press & momentarily hold the top <i>START</i> portion of the switch release when fan starts & switch springs back to remain ON. Hood must be restarted in this manner after any lost of power.
*6	<u>CHANGE SOON</u>	Illuminates when the EAC Cleaning Timer enters <b>[WARNING]</b> mode. The cell needs to be cleaned (or exchanged with a fresh cell) within the next <b>24 hours</b> .
*7	<u>CHANGE NOW</u>	Illuminates when the EAC Cleaning Timer enters <b>[TIMEOUT]</b> mode. Allowed time between cleanings (or exchange) has expired. The cell must immediately be cleaned (or exchanged). An audible alarm sounds & both hood and fryer are locked out, preventing continued operation until the appropriate activities are performed.
*8 <b>SNOOZE</b> the hood & fryer to continue operating to finish a cook cycle		Pressing this button delays <b>[TIMEOUT]</b> mode for <b>2</b> hours, thus allowing the hood & fryer to continue operating to finish a cook cycle or meet customer demand. Two (2) snooze cycles are allowed, then the shutdown will proceed.

\* Not present on HEPA Filter Models

# Free Standing Ventless Hood FSH-2 & FSH-2A-99

3 03	Itoms	Included	with	Hood
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Part	Description/Part Number	Function		
	Baffle Filter <b>P/N 42300</b>	Removes large particle contaminant from the air stream.		
	EAC Filter P/N 20520 Replaced by P/N 41254 HEPA Filter for CE listed models or for Model with HEPA Option	Removes smoke and fine particle contaminant from the air stream.		
	Charcoal Filter <b>P/N 30248</b>	Helps to control cooking odors in the recirculated air.		



### 3.03 Items Included with Hood

Part	Description/Part Number	Function
FORMING CR Y ST AL SMOOLE OFENER DESCRIPTION DESCRIPTI	(1) Sample Can Foaming Crystal Cleaner/Degreaser P/N 41510 12-count Case NSF approved	Foaming spray degreaser for cleaning EAC collector cell. Sample can of <i>GILES</i> recommended collector cell cleaner. It is readily available from Giles and on-line distributors, as well as many nationwide retail outlets.



#### Operation 4.

This section explains the procedures for hood operation & filter maintenance.

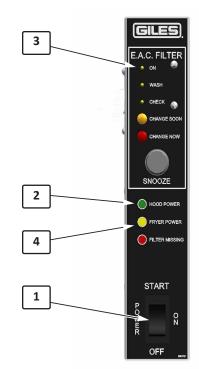
#### **Hood Operation** 4.01

Before starting the hood, be sure that all filters are in place & properly seated. The hood will not start unless the Filter Access Cover is in position & secured properly.

#### To Start the Hood:

- 1. Press & momentarily hold the top **[START]** portion of the **POWER** switch (1) until the hood blower starts running. Release & switch will spring back to remain ON.
- The green **HOOD POWER** light (2) & the small **EAC** [ON] light (3) should 2 turn ON. A constant tone alarm may sound briefly, then stop as the fan reaches full speed.
- 3. At that time, the amber **FRYER POWERED** light (4) should turn ON to indicate that power is being supplied to the fryer and it is ready for use.

Should this sequence not occur as described or should any other lights turn ON or alarms sound, see the Section 7, Troubleshooting for possible cause and corrective action.



#### To Shutdown the Hood:

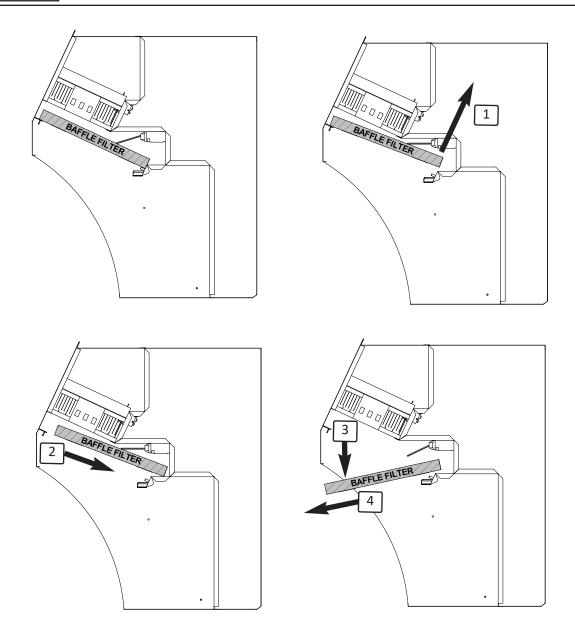
- Press the bottom **[OFF]** portion of the **POWER** switch (1). 1.
- Blower stops & all indicator lights turn OFF. 2
- 3. Power to the fryer is shutdown.

#### Filter System, Filter Maintenance, & Filter Alarms 4.02

4.02.1 Ventl	4.02.1 Ventless Hood Filter Table										
Filter	When to Clean/ Replace	How to Remove	How to Clean	How to Install							
Baffle Filter	Clean daily	Section 4.02.2	Section 5.01.1	Section 4.02.3							
E.A.C. Collector Cell	Clean daily	Section 4.02.4	Section 5.01.2	Section 4.02.5							
HEPA Filter <b>(Optional)</b>	Change as needed DO NOT CLEAN	Section 4.02.4	DO NOT ATTEMPT TO CLEANREPLACE <u>ONLY!</u> Section 5.01.4	Section 4.02.5							
Charcoal Filter	Replace every 30 to 40 days (approx),	Section 4.02.6	DO NOT ATTEMPT TO CLEANREPLACE ONLY! Section 5.01.3	Section 4.02.6							

#### **Baffle Filter Removal** 4.02.2

ĺ	<u> M</u> A		The baffle filter is fabricated from thin gauge sheet metal & can have sharp exposed edges, which may
		Sharp edges Watch your fingers	cause cuts. Use due caution when handling and cleaning. Heavy duty rubber gloves are advised.



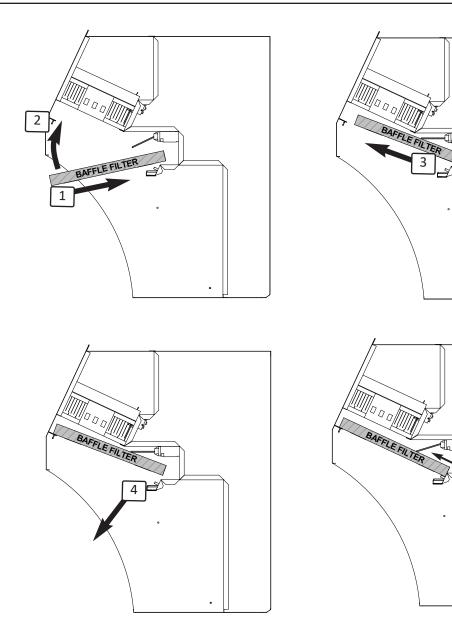
#### Turn OFF hood power ...

- (1) Lift rear edge of filter off of the support studs 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*.
- (4) Remove filter from hood.

#### **Baffle Filter Installation** 4.02.2

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**NING** The baffle filter is fabricated from thin gauge sheet metal & can have sharp exposed edges, which may cause cuts. Use due caution when handling and cleaning. Heavy duty rubber gloves are advised. rp edges tch your



Switch arm must be actuated by the 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*.

(3) Slide filter forward until front edge rests on *support* inside *front header*.

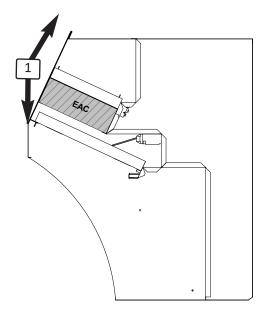
(4) Allow back edge to drop down and rest on *support studs*.

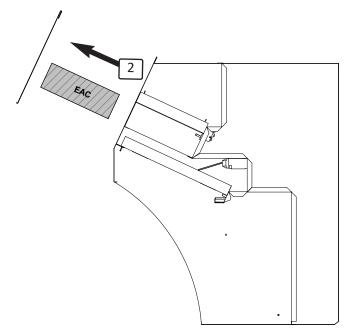
IMPORTANT! As shown above, the filter body must engage & actuate the switch actuator lever located at the rear of hood, on the right side. Filter must be installed so that the baffles are positioned vertically, NOT horizontal.

### Hood Operation Free Standing Ventless Hood

FSH-2 & FSH-2A-99

#### E.A.C. Collector Cell / HEPA Filter Removal 4.02.4

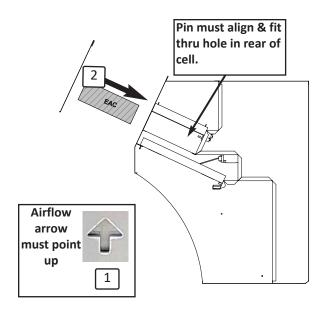




#### Turn OFF hood power ...

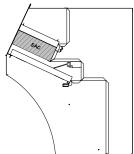
- (1) Unlatch *access cover* & lift off.
- (2) Grasp E.A.C. Collector Cell / HEPA Filter & pull straight out, on a slight upward angle.

#### 4.02.5 E.A.C. Collector Cell / HEPA Filter Installation



- (1) Ensure the airflow indicator arrow points [UP] & the cell's contact pad faces to the *right side*.
- 2 Align cell (or filter) in *guides* and slide into hood. If installed properly, cell is flush with hood front. If not, cell is not installed incorrectly.

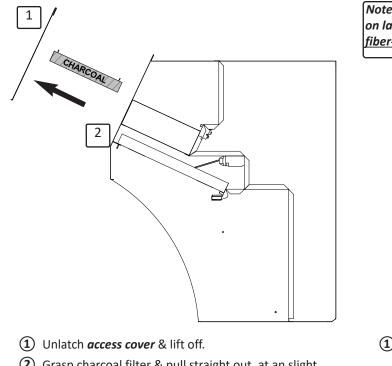
**3** Replace *access cover* and latch.



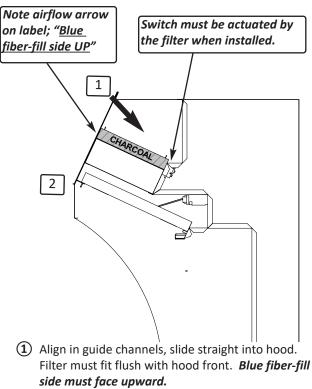
NOTE: HEPA Filter models ONLY - charcoal filter will be located below the HEPA filter, so that air passes through it first. When installed, the filter must properly engage a proofing switch located on the back wall.

#### Charcoal Filter Removal & Installation 4.02.6

Turn OFF hood power ...



2 Grasp charcoal filter & pull straight out, at an slight upward angle.



(2) Replace & latch cover.

NOTE: HEPA filter models ONLY - charcoal filter is located below the HEPA filter, so that air passes through it first. When installed, the filter must properly engage a proofing switch located on the back wall.

#### **Hood Filter Alarms** 4.03

#### Baffle or Charcoal [or HEPA] Filter Missing 4.03.1

If either the **baffle, charcoal, or HEPA** filter is not in place, or not positioned correctly, the red [FILTER MISSING] light will turn ON. Power to the fryer under the hood is shutdown until the condition is corrected ... the amber [FRYER POWER] light turns OFF.

- No audible alarm sounds.
- Hood fan continues running. •
- Check to confirm that all filters are in place. See Sections 4.02.3 4.02.5 4.02.6, Filter Installations.
- Remove & reinstall filters to verify that they are seated properly in the guides & are positioned fully into the filter compartment ... access cover should fit flush with hood front. Each filter must also actuate a proofing switch. Charcoal & HEPA filter switches are in the rear wall. Baffle filter switch is a lever switch on the right side under the hood.



#### Baffle or Charcoal [or HEPA] Filter Clogged 4.03.2

If any filter becomes clogged, or there are other conditions that obstruct airflow enough to fall below the minimum required for effective capture of cooking vapors, power to the fryer under hood is shutdown, the amber [FRYER POWER] light turns OFF until corrective action is taken.

- A constant steady tone alarm sounds ... no indicator lights turn ON. •
- Hood fan continues running.
- Clean the baffle filter, see Section 4.04.1, Baffle Filter Cleaning. ٠
- Replace charcoal (or HEPA) filter with fresh new filter, see Section 4.03.5, Charcoal Filter ٠ Maintenance.
- Inspect inside the hood plenum to ensure that no other obstructions exist.
- Check the hood exhaust outlet & be sure that nothing is obstructing it or the surrounding area.

NOTE: There is no indicator light for clogged filter, only an audible alarm.



#### E.A.C. Filter Status & Alarm 4.03.3

Three LED lights on the control panel indicate the operational status of the *Electronic Air Cleaner (E.A.C.)* system.

[ON] Indicates that the E.A.C. cell is installed, powered & operating properly. This will be the only light ON when the system is operating normally.

#### **[WASH]** This light turns ON to indicate:

- Collector cell is not installed or is mis-aligned.
- Collection fins contain excessive amount of captured grease residue.
- There is poor cell contact with the electrical contacts inside hood.
- Too many lonizer wires are missing from the cell.

When the **[WASH]** light is ON, an alarm condition exists & air cleaner is not functioning. After approximately two (2) minutes, a beeping alarm tone begins sounding & shortly thereafter, power to the fryer under the hood is shutdown ... the [FRYER POWER] light turns OFF.

[WASH] light is <u>NOT</u> intented to be used as the signal for routine cell cleaning, <u>DO NOT</u> use as such. Typically, the collector cell must be cleaned DAILY to ensure continued optimum performance. See Section 5.01.2, EAC Filter Cell Cleaning.

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

- Ionizer wire is broken & touching cell frame.
- Cell is damaged & has shorted out to ground.
- Collection fins are shorted out due to excessive moisture.

When **[CHECK]** light is ON, system is no longer functioning to clean the air, even though the hood continues to run & the fryer remains powered. DO NOT CONTINUE TO USE FRYER WHEN THIS CONDITION EXIST!

#### If none of the LED lights turn ON when hood is started, the system power supply may be faulty ... call for service.

The following actions may clear the alarm condition:

- 1. Turn OFF hood **POWER** switch.
- 2. Remove the E.A.C. cell & clean as described in *Section 5.01.2*.
- 3. Inspect the cell for broken or missing ionizer wires, bent fins, or other damage. Ionizer wires are replaceable (when ordering replacements, note length ... 16" & 20" are available). Bent fins may be gently straightened by hand, so that no fin is touching an adjacent fin. A cell with excessive damage (broken frame, badly bent frame, broken insulators, etc) must be replaced.
- 4. Inspect the E.A.C. contacts inside hood. Clean grease accumulation away with a mild degreasing cleaner & dry thoroughly.
- 5. Replace collector cell (Section 4.02.5) & restart hood (Section 4.01). If the condition persist, contact a factoryauthorized service company.



#### 4.04 E.A.C. Cell Cleaning Timer (not on HEPA version models)

The feature is intended to help users maintain a proper cleaning routine for the sustainable *E.A.C. Collector Cell*. Timely cleaning is essential to ensure that the hood continues to effectively remove grease-laden cooking vapors from recirculated air.

After a preset amount of time, the system signals user that it is time to clean the collector cell ... or if available, exchange with a previously cleaned one. If the task is not completed within an alloted timeframe, a timeout condition occurs & power to the fryer is *shutdown* and remains locked-out until cleaning is performed. After the filter maintenance tasks are completed, the timer automatically resets & normal operation is restored ... a new countdown begins.

Should a shutdown occur during a peak demand period or while cooking is in progress, a SNOOZE feature is provided to temporarily postpone timeout & allow continued operation for a short period of time.

Timer indicator lights & the [SNOOZE] button are located on the hood control box panel.

#### Timer Operation:

#### NOTE: Not included on the HEPA filter version hood.

#### (1) CHANGE SOON

The amber indicator turns ON when timer enters [WARNING] mode. If the collector cell is cleaned (exchanged) within the next 24 hours, the timer automatically resets & begins a new countdown. Normal operation continues without interruption.

#### (2) <u>CHANGE NOW</u>

The red indicator turns ON when timer enters [TIMEOUT] mode, signaling that the alloted amount of time between cleanings has expired. An audible alarm sounds & fryer power is *shutdown*. Power is *locked out* until cleaning task (exchange) is completed. Hood POWER & FRYER POWER lights will turn OFF.

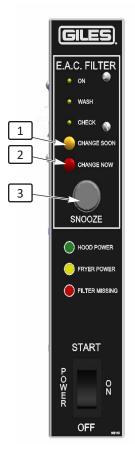
Placing **POWER** switch in the **[OFF]** position silences the alarm, but returning switch to [ON] will not restart the hood unless timer has been reset by completion of cleaning tasks.

#### (3) SNOOZE Button

In the event that [TIMEOUT] occurs during a period of high customer demand or while a cooking cycle is in progress, the **SNOOZE** feature may be used to delay [TIMEOUT] mode. Pressing the [SNOOZE] button temporarily places timer back into [WARNING] mode for two (2) hours, allowing continued operation.

*Two (2)* snooze periods are available ... during the second, the **[CHANGE**] **SOON** light flashes, indicating final period. After the second period expires, fryer is once again locked-out until the E.A.C. cell is cleaned (exchanged).

NOTE: [SNOOZE] Button is only effective if timer is in [TIMEOUT] mode & the red [CHANGE NOW] light is ON.



## Hood Operation Free Standing Ventless Hood

FSH-2 & FSH-2A-99

NOTES:

### Free Standing Ventless Hood FSH-2 & FSH-2A-99

### 5. Cleaning & Maintenance

This section explains the various cleaning & maintenance procedures needed to keep the hood operating safely and at peak performance.

### ACAUTION

- •• DO NOT steam clean hood or spray with water.
- •• DO NOT use products containing chlorine or caustic chemicals.
- •• **DO NOT** use abrasive products, steel wool or scouring pads.

Before performing any cleaning activities, disconnect hood & appliance power at the main breaker panel.

#### 5.01 Filter Cleaning & Maintenance

The following sections describe the procedures for cleaning & maintaining hood filters. Conscientious adherence to these procedures is essential for maintaining optimum & satisfactory performance.

#### 5.01.1 Baffle Filter Cleaning



The stainless steel baffle filter is fabricated from thin gauge sheet metal that has potential to have sharp edges. Exercise due care when handling & cleaning the filter to avoid injury. *It is recommended that heavy-duty rubber gloves be worn*.

Generally, the grease baffle filter should be cleaned daily. Remove filter & clean in sink with a mild, biodegradable, degreasing cleaner (*Giles recommends Simple Green® Crystal Foaming Spray Cleaner*). Rinse & dry thoroughly. Reinstall completely dry filter in the unit. Baffle filter may be washed in a dishwasher.

Ensure that filters are completely dry before reinstalling in hood. NEVER PLACE WET FILTER INTO THE HOOD!

### 5.01.2 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 & cleaning the cell. *It is recommended that heavy-duty rubber gloves be worn as a precaution*.

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

IMPORTANT: The cell <u>CANNOT</u> withstand washing in commercial dishwashing equipment & some commercial cleaners/detergents will cause oxidation, or create a layer of contamination, on collector fins that can lead to system malfunction & result in interruption of power to the cooking appliance.

### Free Standing Ventless Hood FSH-2 & FSH-2A-99

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

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

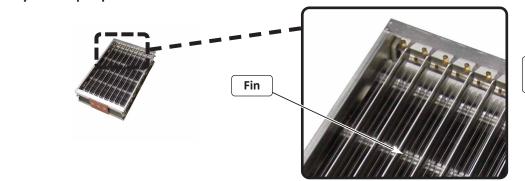
• Preferred: <u>Spray Foam</u> - uses Simple Green<sup>®</sup> Crystal Foaming Spray Cleaner/Degreaser. A readily available foaming aerosol that is an exceptionally effective cleaner, as well as being safe for use on aluminum (NSF approved, food-grade, non-toxic & biodegradable). Cleaning the E.A.C. cell is quick & easy with this convenient ready-to-use cleaner. A complimentary sample has been supplied with your new equipment. It can be ordered from *Giles, item #41510 (12-count case)* or is also available from various on-line sources & retail outlets. When used as directed, a case of cleaner should last approximately 4 to 5 weeks, depending on equipment model.



• Alternative: <u>Soaking</u> - uses a diluted solution of *Simple Green® Pro-HD* & 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 sustainable, designed to provide years of service.

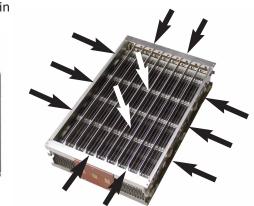
**CAUTION** While handling & cleaning the cell, take care not to bend the collector fins or break the fine ionizer wires that are stretched across the cell face. Bent fins & broken/missing wires can prevent the electronic collection system from performing properly. System faults & alarms will occur that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



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

#### A. Preferred Cleaning Method - Spray Cleaner

- 1. Remove collector cell from hood (see *Section 4.02.4*) and lay on a drain board, or other suitable surface.
- 2. Hold can at the appropriate distance & spray Simple Green<sup>®</sup> Crystal Foaming Degreaser onto the cell, completely covering all surfaces ... collector fins, contact plate, brass fittings & inside corners of the frame. Turn cell over & 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.



Ionizer Wire (9) required

#### E.A.C. Filter Cell Cleaning - continued 5.01.2

- 4. Carefully move cell to sink & 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 have not been evaluated and may contain corrosive ingredients that may damage the metal, causing cell 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 collector 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 collector cells when diluted with water in a 1:12 ratio (e.g. 1/2 gal. cleaner to 6 gals clean 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. The soaking method requires a suitable, leakproof container, such as a tall trash bin, recycle bin, plastic tote, or the GILES soak tank\*. Container must be large enough to hold the cell along with enough diluted degreasing solution to submerge it completely for soaking.
- 2. Fill container with fresh water to a level that will basically cover the cell. Measure the water as container is filled & note the quantity. Add Simple Green® Pro-HD in the ratio of 1:12 to the water (e.g. 8 gals. of water will require 85-1/2 ozs. degreaser. Stir solution to mix.
  - \* NOTE: The GILES soak tank (purchased separately, Item# 91123) is specifically designed & sized for soaking the cell. Add 1/2 gal. of cleaner & fill tank to the marked "FILL" line with clean water.
- 3. After preparing a quantity of degreaser solution sufficient to completely cover the cell in the soaking container, carefully grasp cell & 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 slightly & briefly agitate up & down in the solution to dislodge grease residue.
- 5. Carefully remove cell from container & follow Steps 4 thru 6 as described 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 & replenish solution when a greasy film remains visible, floating on the liquid. When soaking, always ensure that solution completely covers the cell ... add some water if needed.









### Free Standing Ventless Hood FSH-2 & FSH-2A-99

#### 5.01.3 Charcoal Filter Maintenance

**CAUTION** Charcoal filter is a single-use, consumable filter. NEVER attempt to clean & reuse ... doing so can possibly damage the unit.

Charcoal filter is a consumable item which must be replaced periodically (see *Sections 4.02.6, Removal & 4.02.7, Installation*). It <u>CANNOT</u> be cleaned & reused. Typical replacement frequency is every **30 to 40 days**, depending on usage.

Use GILES replacement Item No. 30248. Record date of replacement on the new filter label.

IMPORTANT: Failure to use Giles OEM parts and OEM replacement filters may void the factory warranty.

#### 5.01.4 HEPA Filter Maintenance [HEPA Version Model Only]

The **FSH-2A-99 Hood** is available with a replaceable **HEPA Filter** as an alternative to the electronic air cleaning (E.A.C.) system with sustainable collector cell.

The *HEPA filter* is a consumable item which must be replaced periodically (see *Sections 4.02.5, Removal & 4.02.5, Installation*). *It <u>CANNOT</u> be cleaned & reused.* Typical replacement frequency can vary significantly depending on cooking activities (quantity & types of food cooked each operating day). A **HEPA** filter should probably have a useful service life of approximately **3 to 4 months**, depending on usage.

If a **HEPA** filter has been in service for a period of time & a clogged filter alarm condition occurs *(see Section 4.03.2),* first replace the charcoal filter. If the alarm clears, indicates the **HEPA** filter if still serviceable. Should the alarm *NOT* clear with the new charcoal filter, the filter probably needs to be replace. *DO NOT attempt to clean & reuse a HEPA filter.* 

Use GILES replacement Item No. 41254. Record date of replacement on new filter.

IMPORTANT: Failure to use Giles OEM parts and OEM replacement filters may void the factory warranty.

#### 5.02 General Hood Cleaning

Following sections describe procedures for General Hood Cleaning.

CAUTION

DO NOT wash down hood with water spray.

DO NOT steam clean or use pressure washing equipment.

**DO NOT** use products containing chlorine or other caustic chemicals.

**DO NOT** use abrasive products, steel wool or scouring pads.

The factory-recommended product to use for general cleaning/degreasing of this equipment is *Simple Green® Crystal Foaming Spray Cleaner/Degreaser*, a readily available, biodegradable, non-toxic effective degreasing cleaner.

### Free Standing Ventless Hood FSH-2 & FSH-2A-99

#### 5.02.1 Weekly Hood Cleaning

Exterior: Use a good quality stainless steel cleaner to clean external stainless steel surfaces.

**Inside Skirt Section:** Use a mild, non-toxic, degreasing cleaner (see recommendation above) to clean the inside surfaces of the hood skirt section directly above the appliance

Weekly Cleaning should also include cleaning the baffle filter and E.A.C. collector cell as explained in *Section 5.01*.

#### 5.02.2 Quarterly Hood Cleaning

To maintain effectiveness & performance, the hood should be deep cleaned, at a minimum, every 3 months.

- 1. Disconnect power to the unit, preferably at the circuit breaker.
- 2. Unplug & remove cooking appliance from under Hood.
- 3. Remove all filters.
- Use a soft cloth, or sponge, and a mild bio-degradable degreasing cleaner (Simple Green<sup>®</sup> Crystal Foaming Spray Cleaner) to clean inside the entire hood plenum, removing grease film accumulation from surfaces.
- Inspect the hood fan and, if possible, clean any grease build-up from the blades using degreaser & a small brush (use cleaner sparingly).
   NOTE: When restarting hood after cleaning, hold a cardboard box, or other suitable item, over the exhaust outlet to catch residue/cleaner which may be discharged from the blower.



- 5. Thoroughly clean the under-hood area & all exterior surfaces with mild degreaser or a good quality stainless steel cleaner.
- 6. Allow hood to thoroughly dry or wipe dry with clean dry cloth.
- 7. Clean baffle filter and E.A.C. collector cell see *Sections 5.01.* If necessary, obtain a fresh new charcoal filter ... reinstall all filters.
- 8. Restore power and reposition the cooking appliance.

#### 5.02.1 Hood Maintenance

This section explains periodic maintenance procedures for the ventless hood system. Adhering of these procedures will help to maintain the unit's continuing performance.

A Maintenance and Service Log is provided in this manual, see Section 5.05.

### Free Standing Ventless Hood FSH-2 & FSH-2A-99

#### 5.03.1 Monthly Hood Interlock Inspection (Generally Performed by User)

Hood design incorporates various interlock switches to ensure that the unit will shutdown if certain conditions exist which are not consistent with safe & effective operation. The interlocks should be inspected & tested <u>MONTHLY</u> as described below. Use the **Maintenance & Service Log** to record completion of testing. If problems are detected, contact *GILES* or an authorized service company.

- 1. **Door Interlock Test:** Start hood. With hood running, unlatch & slightly lift the bottom lip of the filter access cover to confirm that hood powers **OFF** when cover is lifted & the fryer under the hood turns OFF, or cannot be turned ON.
- <u>Baffle Filter Test</u>: Remove baffle filter then turn ON hood power. Verify that the red [FILTER MISSING] light turns ON and the [FRYER POWER] light turns OFF. Check to ensure that fryer under hood will not turn ON. Reinstall the baffle filter. See Sections 4.02.2 & 4.02.3, Removal & Installation.
- 3. <u>Charcoal (HEPA) Filter Test</u>: Same procedure as **#2** except perform for the charcoal filter. Reinstall filter. See *Sections 4.02.6, 4.02.7, Removal & Installation*. Same procedure applies for a *HEPA filter*, if equipped.
- 4. <u>E.A.C. Filter Test (N/A for HEPA Filter Version)</u>: Same procedure as #2 & #3 except remove the E.A.C. collector cell, close and latch filter cover. Turn ON hood power. Verify that [WASH] light is ON, along with the amber [FRYER POWER] light. Wait approx. two (2) minutes. A beeping tone alarm should begin sounding. Shortly, the [FRYER POWER] light should turn OFF. Check to ensure that fryer under hood will not turn ON. Reinstall the E.A.C. cell. See Section 4.02.4. & 4.02.5, Removal & Installation.
- 5. Filter Clogged Test: Perform this test ONLY after installing new charcoal filter. Start hood normally & allow to run. Use cardboard or other material to completely block hood exhaust outlet, holding it firmly in place so that no air is escaping. Within a few seconds, a continuous tone alarm should begin sounding & the [FRYER POWER] light should turn OFF. Check to ensure that fryer under hood will not turn ON. Remove the obstruction ... the alarm should silence & the [FRYER POWER] light should turn OFF.

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 providers, or call *GILES Services* at 800-554-4537 for assistance in locating a Representative or service provider.

#### 5.04 Fire Suppression System Maintenance

The self-contained fire extinguishing system in the hood must be maintained in accordance with the **Standard for Wet Chemical Extinguishing Systems, NFPA 17A** and with the instructions of the system installer.

All inspection, maintenance, troubleshooting, repair & general servicing of the fire extinguishing system must be performed by an authorized **Ansul® Service Company**. Required maintenance activities are described in the subsequent sections.

### Free Standing Ventless Hood FSH-2 & FSH-2A-99

#### 5.04.1 Semi-Annual Fire Suppression System Inspection & Maintenance

Service & inspection of the fire suppression system must be performed by an authorized **Ansul® Service Company**. As a minimum, field inspection of the system must be conducted semi-annually (every 6 months) and shall consist of the following:

- Confirm that the fire hazard potential has not changed.
- Inspect suppressant storage tank for chemical level.
- Inspect & test the Automan release mechanism.
- Check all nozzles to ensure they are free of grease build-up. Confirm that all blow-off caps are in place & in good condition ... replace as needed. See *Section 2.05.2, Fire Extinguisher Nozzle Locations*.
- Inspect & test the remote manual activation station for function and wear.
- Install test detector link ... cut to simulate & test automatic actuation.
- Inspect & clean detector links. Confirm that detector links are of the correct temperature rating. See *Section 2.05.1, Fire Suppression Detector Links & Location*.
- Inspect link conduit & wire cable for wear at pulleys & detectors ... replace if necessary.
- Record maintenance date and service performed in a permanent file, and sign-off on tag attached to system in a conspicuous location.

#### 5.04.2 Annual (12-Mo) Fire Suppression System Inspection & Maintenance

#### Same as Semi-Annual Inspection & Maintenance plus

• All detector links must be replaced with new. See Section 2.05.1, Fire Suppression Detector Link Specification & Location.

### 5.04.3 12-Year Fire Suppression System Inspection & Maintenance

#### Same as Annual Inspection & Maintenance plus

- Replace wet-chemical fire suppressant.
- Hydrostatic test & certify suppressant tank and compressed gas charging cartridge. As alternative these components can be replaced with new.
- Flow test the regulator.

## Free Standing Ventless Hood

FSH-2 & FSH-2A-99

#### 5.05 Inspection & Maintenance Log

	Check							Initial/Date	Check						Initial/Date		
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1	Door Check	Section 5.03.1
2	Baffle Filter Check	Section 5.03.1
3	EAC Filter Check	Section 5.03.1
4	Charcoal Filter Check (and HEPA)	Section 5.03.1
5	Filter Clogged	Section 5.03.1
6	Quarterly Cleaning	Section 5.02.2
7*	Semi-Annual Fire Suppression System	Section 5.04.1
8*	Annual Fire Suppression System	Section 5.04.2

\* Must be performed by an authorized Ansul® Service Agent

## Troubleshooting

### Free Standing Ventless Hood FSH-2 & FSH-2A-99

### 6. Troubleshooting

This section describes troubleshooting procedures for the **FSH-2**, **FSH-2A-99 Ventless Hoods**. Refer to the wiring diagram provided with the unit as needed for more detailed analysis.

### 

• Electrical troubleshooting procedures should be performed **ONLY** by qualified service personnel. Serious injury, even death, will result from contact with energized electrical components.

#### 6.01 Troubleshooting Procedures

Problem	Probable Cause	Corrective Action
Hood will not turn ON	<ul> <li>a. Filter Access Cover not properly positioned &amp; latched.</li> </ul>	Confirm cover properly positioned.
	b. <b>START</b> portion of power switch not held until hood starts	Press & momentarily hold <i>START</i> portion of switch until blower starts.
	c. Power switch is faulty	Replace switch.
	c. Improper supply voltage	Connect to proper electrical supply.
	e. Not properly connected to power source.	Confirm connections & correct.
	f. Blown fuse or tripped circuit breaker.	Check fuse in hood or breaker at main electrical panel.
[FILTER MISSING] light ON at start-up	a. Baffle or charcoal filter not installed or not properly seated	Install filter and/or check filter positioning inside hood.
EAC [WASH] light ON & intermittent	a. Excessive film build-up on fins	Clean the EAC cell, Section 4.04.2
(beeping) alarm sounding	b. EAC cell is not installed	Install EAC cell
	<ul> <li>Poor connection at contact plate in- side hood.</li> </ul>	Check cell position, clean contacts.
	d. Faulty EAC contact plate	Have plate inspected, replace if needed.
	e. Missing ionizer wires	Replace wires, (9) required.
EAC [CHECK] light ON; no alarm sounding	a. EAC shorted to ground (damaged)	Replace or repair the EAC cell.
	<ul> <li>b. High voltage wires shorted to ground.</li> </ul>	Correct shorted condition.
	c. Collector fins shorted out due to excessive moisture.	Eliminate condensation causes - cold air being drawn into hood, etc.

### Troubleshooting Free Standing Ventless Hood FSH-2 & FSH-2A-99

#### **Troubleshooting Procedures - continued** 6.01

Problem	Probable Cause	Corrective Action
Fryer will not power-up: • [HOOD POWER] light ON • [FILTER MISSING] light ON	a. Baffle filter is missing or not properly installed	Install filter / check positioning.
• [FRYER POWER] light OFF	<ul> <li>b. Charcoal filter is missing or not properly installed</li> </ul>	Install filter / check positioning.
	c. Faulty filter switches.	Test & replace as needed.
Fryer will not power-up: • [HOOD POWER] light ON • [FILTER MISSING] light OFF	a. Fire Suppression system is not armed.	Contact Ansul service company.
<ul> <li>[FRYER POWER] light OFF</li> <li>No alarm sounding</li> </ul>	b. Ansul switch is faulty	Contact Ansul service company.
<ul> <li>Fryer will not power-up:</li> <li>[HOOD POWER] light ON</li> <li>Continuous (steady) tone alarm</li> </ul>	a. Baffle or charcoal filter clogged	Replace the charcoal filter with a new, clean baffle filter.
<ul> <li>Continuous (steady) tone alarm sounding.</li> <li>[FRYER POWER] light OFF</li> </ul>	b. Hood exhaust outlet excessively block	Clear of any obstructions.
	<ul> <li>vacuum switch is out of adjustment</li> </ul>	Test & adjust vacuum switch.
	d. Kinked or blocked vacuum line	Remove vacuum line kinks or blockage.
	e. Fan running slow or blades are loaded with grease build-up.	Check voltage and inspect blower; clean if needed
Fryer will not power-up: • [HOOD POWERED] light ON	a. Excessive grease film built up on collector fins; too dirty	Clean the EAC cell, Section 4.04.2.
<ul> <li>[WASH] light ON</li> <li>Intermittent (beeping) tone alarm</li> </ul>	b. EAC cell is not installed	Install clean EAC cell.
sounding. • [FRYER POWER] light OFF	c. EAC driver board is faulty	Test & replace EAC power supply if needed.
	d. Poor connection at contact plate; dirty contacts, mis-alignment, faulty contacts.	Check cell position, clean contacts, inspect contact plate & replace if needed.
	e. Ionizer wire(s) missing	Replace missing wire(s)
Fryer is ON: <ul> <li>[HOOD POWER] light ON</li> <li>[CHECK] light ON</li> </ul>	a. Ionizer wire broken & touching chassis.	Replace ionizer wire.
<ul> <li>No alarm sounding, but cell is NOT cleaning air.</li> </ul>	b. Collector fins shorted to ground by moisture.	Dry cell, determine cause of moisture, cool air being drawn into hood creating condensation.

### Free Standing Ventless Hood FSH-2 & FSH-2A-99

### 7. Parts List

This section lists some of the various parts that are available for replacement on the unit. This is not an all inclusive listing; please contact an authorized *Giles* representative or service agent concerning other parts that may be replaced in the field.

### 7.01 Parts Ordering & Service Information

*Giles* is an equipment manufacturer and does not sell parts direct. Parts for our equipment are available through authorized service companies, part distributors, and/or kitchen equipment dealers. If assistance with sourcing parts or equipment repair service is required, please contact a *GILES* Manufacturer's Representative to assist with locating a parts source or authorized service provider near you. For further assistance you may contact the *GILES Technical/Customer Service Support* as follows:

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

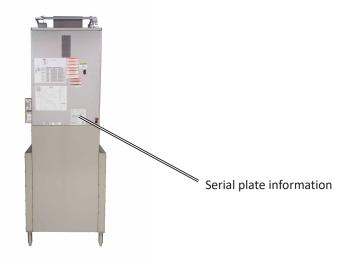
#### ALL OTHERS call: <u>334.272.1457</u>

Normal business hours are 8:00 AM to 5:00 PM Central Time. Calls are handled by an auto-attendant answering system. Please follow the recorded instructions to route your call appropriately. If necessary to contact after hours, leave a voicemail message & a representative should respond within 30 minutes.

Website: www.gfse.com Email: services@gfse.com

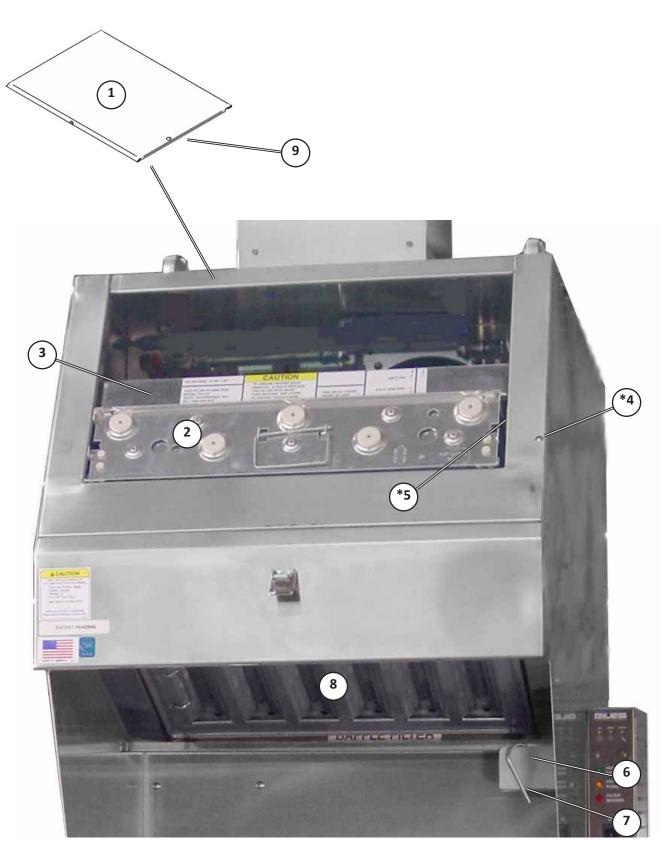
Our goal at Giles is to provide the highest possible quality of service and assistance. To help us accomplish this, please have the following information readily available when calling, along with a brief description of the problem being experienced. Please record the unit information in the table below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

Model:	
Serial Number:	
Voltage:	
Phase:	



# Free Standing Ventless Hood FSH-2 & FSH-2A-99

7.02 Hood - Front Compartment



\* Not shown

## Free Standing Ventless Hood

FSH-2 & FSH-2A-99

7.02	7.02 Parts List for Hood - Front Compartment								
Item	Part No.	Qty.	Description						
1	90254	1	FILTER ACCESS PANEL Assembly						
2	20520	1	EAC FILTER COLLECTOR CELL, 20"						
2	41254	1	HEPA FILTER, 20" (HEPA FILTER VERSION ONLY)						
3	46741	1	CHARCOAL FILTER, ASSY, 20" X 12-3/8"						
*4	23200	1	SWITCH, SNAP ACTION, ROLLER TYPE						
*5	21125	1	CONTACT BOARD, EAC (INSIDE HOOD PLENUM)						
6	30206	1	DRIP CUP						
7	34750	1	DRIP CUP SAFETY PIN						
8	42300	1	BAFFLE FILTER, 20" X 20" X 2", SS						
9	93312	1	DOOR SWITCH ACTUATOR PIN (REQUIRES 1/4" RETAINING RING, #41133)						

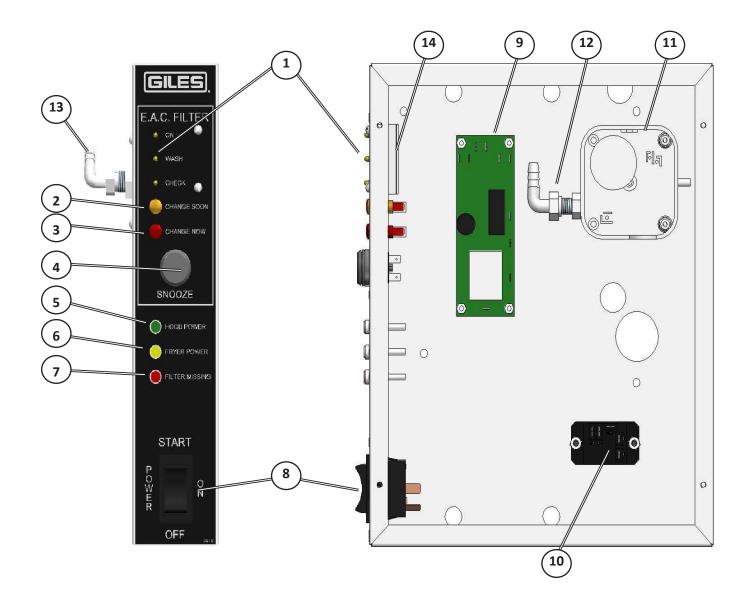
NOTE:

Filter placement is opposite of this depiction in the HEPA Filter version of the hood ... Charcoal filter is located below the HEPA filter.

## Free Standing Ventless Hood

FSH-2 & FSH-2A-99

7.03 Control Box



### Free Standing Ventless Hood FSH-2 & FSH-2A-99

### 7.03 Parts List for Control Box

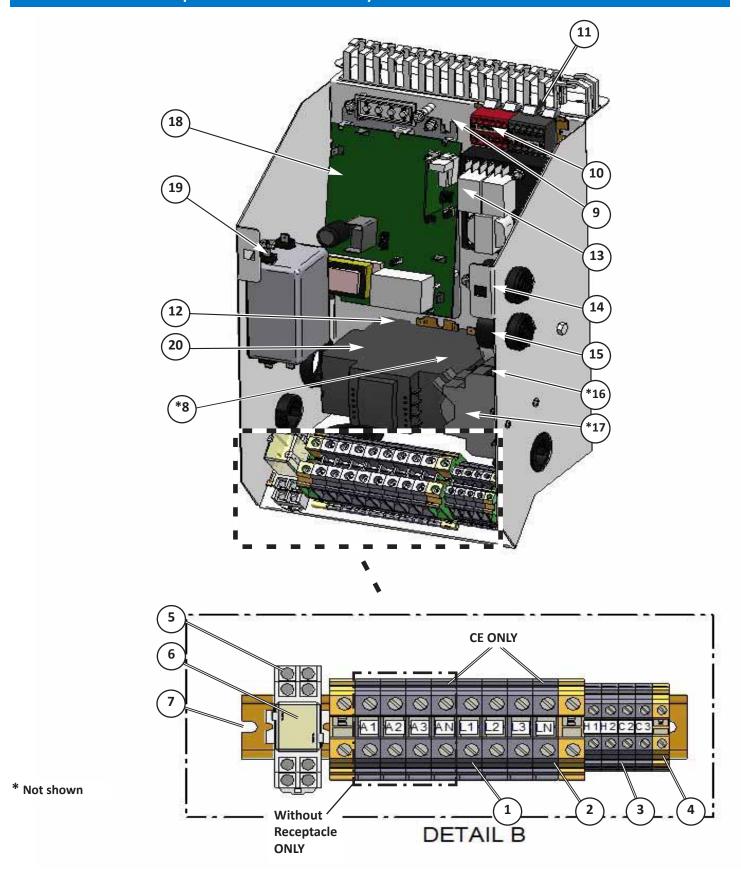
ltem	Part No.	Qty.	Description
1	24209	1	L.E.D. CLUSTER, E.A.C.
2	20694	1	PILOT LIGHT, YELLOW, EAC TIMER
3	20693	1	PILOT LIGHT, RED, EAC TIMER
4	20692	1	SWITCH, MOMENTARY PUSH-BUTTON, EAC TIMER
5	21678	1	INDICATOR LIGHT, GREEN, 125-250V
6	21674	1	INDICATOR LIGHT, AMBER, 125-250V
7	21673	1	INDICATOR LIGHT, RED, 125-250V
8	21441	1	SWITCH, ROCKER, (ON)-0N-OFF, 250V, 20A
9	20572R	1	EAC TIMER BOARD, REPLACEMENT
10	21203	1	RELAY, SPST-NO, 240V
11	20390	1	SWITCH, VACUUM, 0.16 - 1.20 WC
12	40877	1	FITTING, 1/4 BARBED, 90-EL, NYL, 1/8 NPT
13	40880	1	FITTING, 1/4 BARBED, 90-EL, NYL, 1/4 NPT
14	30833	1	BRACKET, EAC LED LIGHT CLUSTER

NOTE: HEPA filter version Control Box does no include Items 1, 2, 3, 4, 9 & 10.

## Free Standing Ventless Hood

FSH-2 & FSH-2A-99

### 7.04 Hood Component Box Assembly



## Free Standing Ventless Hood

FSH-2 & FSH-2A-99

### 7.04 Parts List for Hood Component Box Assembly

ltem	Part No.	Qty.	Description				
1	20303	6	TERMINAL BLOCK, 16-4 AWG, 600V, 85A (ONLY 3 w/RECEPTACLE OPTION)				
	1 20303		(CE MODEL ONLY, NEUTRAL)				
2	20304	2	TERMINAL BLOCK, GROUND, 16-4 AWG				
3	20319	4	TERMINAL BLOCK, 24-8 AWG, 600V, 50A				
4	20320	1	TERMINAL BLOCK, GROUND, 24-8 AWG				
5	20312	1	BASE, RELAY, PLUG-IN, DIN MOUNT				
6	20318	1	RELAY, 240 VAC, 10A, ELECTRO-MECH				
7	97371	1	RAIL, 8.375, DIN-3				
*8	21337	1	TRANSFORMER, 230VAC >115VAC @ 0.86A				
9	21509	1	DISTRIBUTION BLOCK, 12-PL, 12-26 AWG, RED				
10	21510	1	DISTRIBUTION BLOCK, 12-PL, 12-26 AWG, BLACK				
11	21496	4	CLIP, DIN RAIL, END BRACKET, PTFIX, NS-35				
12	94784	2	DIN RAIL, 3"				
13	23776	1	ALARM & SHUTDOWN BOARD, AIR FILTER				
14	22950	1	SONALERT, INTERMITTENT TONE, 250V				
15	23782	1	SONALERT, CONSTANT TONE, 250V				
*16	20411	2	FUSE HOLDER, DIN MOUNT, 690V, 32A				
*17	21693	2	FUSE, 15A, CC, 1.5"				
18	21296	1	POWER PACK, 120V, W/ DRIVER BRD & JUMPERS				
19	20442	1	POWER LINE FILTER, 10A, 10kHz-30kHz (ce version only)				
20	21245	1	CONTACTOR, 60A RES, 3-PL, 100-250V COIL				

#### NOTE:

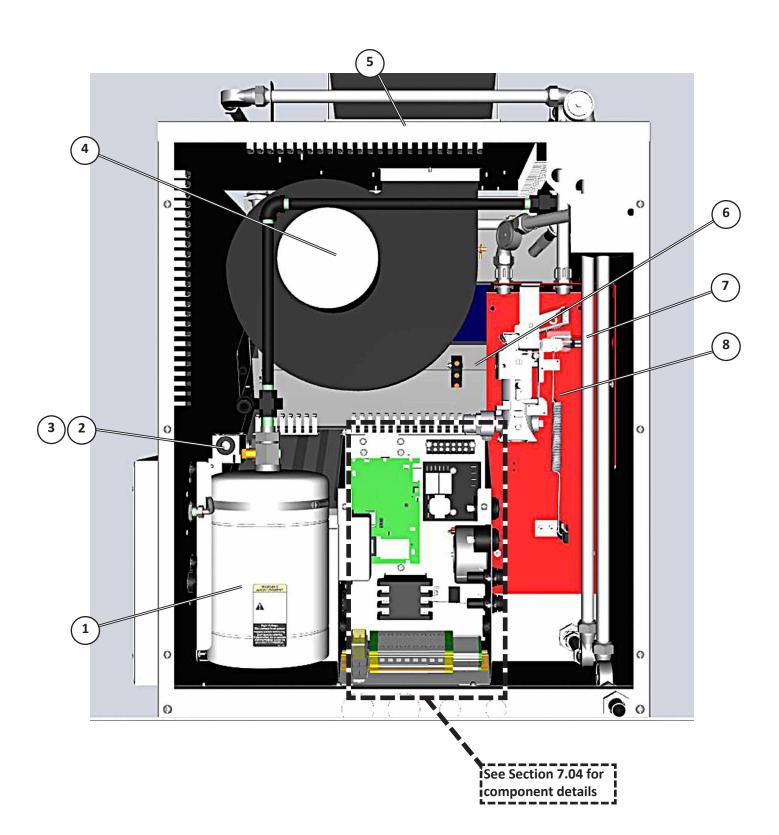
HEPA Filter version does no include Items 8, 13, 14, 18.

\* Not shown

### Free Standing Ventless Hood

FSH-2 & FSH-2A-99

### 7.05 Hood - Rear Compartment



## Free Standing Ventless Hood

FSH-2 & FSH-2A-99

### 7.05 Parts List for Hood - Rear Compartment

ltem	Part No.	Qty.	Description
1	40811	1	TANK, ANSUL, 1.5-GAL SS
2	23778	1	SWITCH, SIDE ROTARY, 240V, 30A, W/O ARM
3	23779	1	ACTUATOR, ROTARY SWITCH
4	33589	1	BLOWER ASSEMBLY
5	41115	1	DAMPER, FIRE, 10 X 10, SHALLOW
6	24237	1 or 2	SWITCH, PLUNGER, 250V, 15A (HEPA VERSION = 2)
7	20002	1	SWITCH, ANSUL, SHUTDOWN/ALARM, 15A, 120V
8	40132	1	BRACKET/RELEASE, AUTOMAN, ANSUL

### Free Standing Ventless Hood FSH-2 & FSH-2A-99

Notes:

