Operations & Service Manual



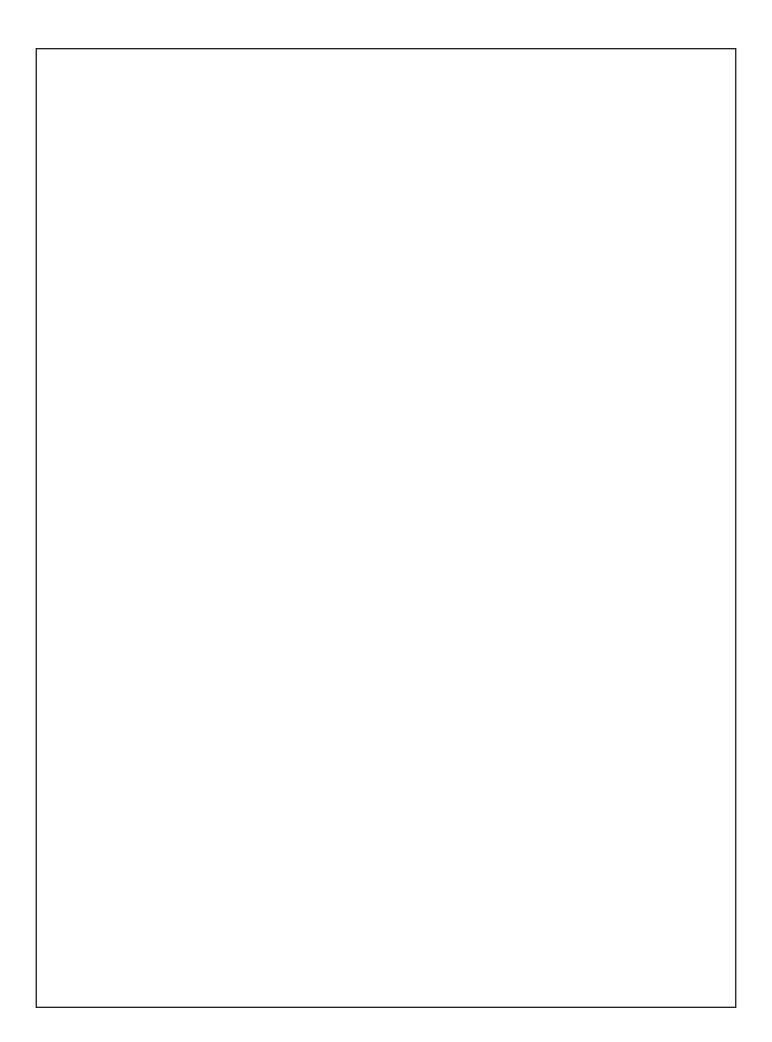


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LIMITED WARRANTY

- 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.

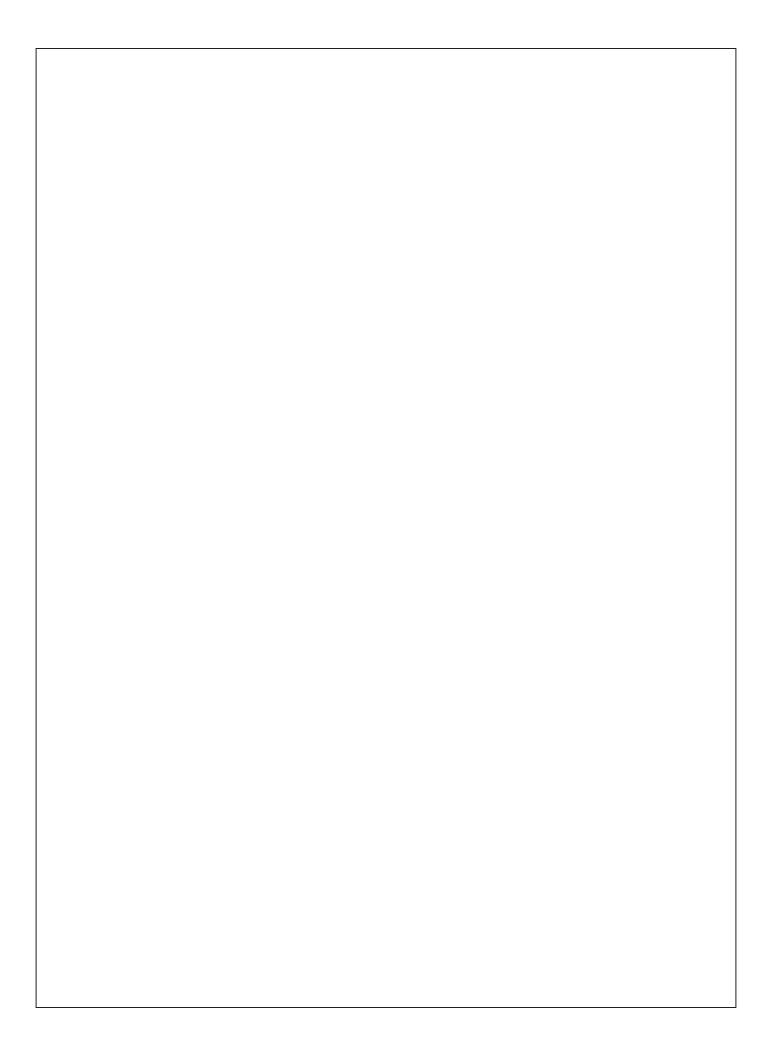


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Safety Model: FSH-6

Safety Overview:

The information contained in this manual has been prepared to describe the proper procedures for safely installing, operating and maintaining the *Giles Ventless Recirculating Hood*.

Throughout the manual, safety precautions are identified by hazard alert symbols and the key words <u>DANGER</u>, <u>WARNING</u> & <u>CAUTION</u>. Hazard information will precede the tasks to which it applies. Suggested, recommended, or other noteworthy information will be identified as **NOTES**, or noted as **IMPORTANT!** Additionally, certain words are used to indicate a specific meaning, or 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 will occur.

Hazard Alert Symbols are used in conjunction with key words DANGER, WARNING & CAUTION, to alert users to potential personal injury hazards and/or poor operating practices. These alerts will immediately precede precautionary measures which are related to avoiding these 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, 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: 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.

ACAUTION

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.

Model: FSH-6 Safety

Specific Safety Precautions:

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

▲ DANGER

- 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 breaker panel supplying the unit.
- Failure to place POWER switch in the [OFF] position when replacing filters, could result in equipment damage, electrical shock or other serious personal injury.
- **DO NOT** wash down interior or exterior of hood with water spray hose.
- 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

- Ventless/recirculating hoods are <u>not</u> suitable for every commercial food service application. Failure to fully comply with all site requirements and installation limitations as outlined in the <u>GFSE Hood Approval Letter and this Manual</u>, may result in poor or highly unsatisfactory hood performance.
- <u>DO NOT</u> use ventless/recirculating hoods with gas-fired cooking appliances due to a high potential for inhalation hazards from carbon monoxide build-up in the operating space. *Hood is approved ONLY for use with electrically heated appliances*.
- Consult a qualified electrical contractor, or kitchen equipment specialist, to ensure that installation will comply
 with all electrical requirements & codes, and that breakers and wiring are of sufficient rating and gauge to power
 this equipment (check the rating label ... a wiring diagram is provided). The unit must be installed and
 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.

Safety Model: FSH-6

Specific Safety Precautions:

ACAUTION

- Exercise care when removing wooden crate framework and the unit from shipping pallet. The hood is very
 heavy; extreme precaution must be exercised when handling and assembling the stand and lifting the hood for
 mounting atop the stand.
- Use extreme caution when moving and positioning the assembled unit into the final location ... it will be very top-heavy. Once located, be sure unit is properly leveled and anchored.
- **DO NOT** operate the appliance unless you understand the function of all components and proper operating procedures (read *Section 3*). Closely follow the instructions in this manual to avoid equipment damage and/or malfunction.
- The equipment 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 due to HOT surfaces, 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 and controls are impact-sensitive. To avoid damage and maintain proper operation, exercise due care when working near the hood.
- Handle the *electronic air cleaner (E.A.C.) collector cell* carefully. **DO NOT** bend the collection plates (fins) or break the fine wires stretched across the cell face, doing so will significantly reduce the performance of the air cleaning system and can eventually result in shutdown of power to appliances beneath hood.
- After cleaning the cell, DO NOT attempt to dry it by installing in hood and running. NEVER PLACE A WET CELL
 INTO THE HOOD ... this can potentially damage the system and cause improper operation. Such damage is
 NOT cover by the factory warranty.
- When cleaning this equipment:
 - DO NOT steam clean.
 - **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.
- **DO NOT** alter, add attachments, or otherwise modify this equipment! **DO NOT** attach any type of ductwork extensions to the hood exhaust in an attempt to redirect the exhaust airflow.
- Failure to comply with CAUTION notices may result in damage to equipment or property. Such damages are NOT covered by the factory warranty.

Model: FSH-6 Safety

Specific Safety Precautions:

NOTE:

- Comply with all appropriate state and/or local heath regulations regarding cleaning and sanitation of food service equipment.
- To clean difficult surface areas, having excessive grease residue build-up, *GILES* recommends using a mild, biodegradable, non-toxic degreasing cleaner such as *Simple Green® Crystal Foaming Spray Cleaner/Degreaser*.
- GILES assumes no responsibility with regard to code compliance during installation or the use of ventless recirculating ventilation equipment. The customer shall be responsible for obtaining all of the necessary approvals from **Authorities Having Jurisdiction (AHJ)** before installation and use of this equipment.

Introduction Model: FSH-6

1. Introduction

THANK YOU for purchasing the *Giles FSH-6 Ventless Recirculating Hood w/72" Floor Stand*, manufactured by *Giles Enterprises*, *Inc.*, Montgomery, Alabama (USA), hereafter referred to as "*GILES*". Giles ventless technology is the result of extensive engineering, research and development. Every unit is thoroughly inspected and tested prior to shipment to ensure that it will operate flawlessly when installed. With proper care and maintenance the hood should provide years of trouble-free service.

To help protect your investment, we recommend that you take the time to review this *Manual* and become familiar with the procedures pertaining to installation, operation, cleaning and maintenance. Adhering to these recommended procedures will minimize potential for costly downtime and future repair expense.

Please retain the Manual for future reference.

1.01 Construction

Hood is constructed of high-grade, formed stainless steel sheet metal of various gauge (16, 18 & 20).

1.02 Design Features

Control Panel:

- LED indicator lights show the operational status for each of the two (2) electronic air cleaner collector cells.
- Red indicator light provides alert signal when operator attention is required to correct a condition which is affecting performance ... missing filters or mis-aligned filters.
- Filter Cleaning Timer ... built-in reminder system to alert associates when it is time the clean E.A.C. collector cells and check the condition of all other filters. Timely and routine cleaning of collection cells is essential to maintaining optimum air cleaning performance.

Filters:

- (2) Baffle Filters capture & remove largest grease particulate.
- (2) Pre-Filters capture & remove smaller particulate and help remove moisture.
- (2) Electronic Air Cleaner (E.A.C.) Collector Cells electrostatically capture fine particle air contaminates.
- (2) Charcoal Filters help to control undesirable cooking aromas in the exhaust air.

Push-To-Start Power:

After power interruption, neither the hood nor interlocked appliances underneath will automatically restart when power is restored. The hood power switch must be pressed to restart. After hood restarts, power is supplied to the interlocked under-hood appliances. Complies with code requirement, where applicable.

Pre-plumbed for Fire Suppression System:

Factory pre-plumbed for connection to a listed *Ansul R-102 wet chemical fire suppression system* ... Includes piping, plenum nozzles (*no appliance drop-downs*), detector link brackets and conduit. *A fire extinguishing system, field installation, set-up, testing and final commissioning shall be provided by the purchaser, and must be supplied* & *installed by an authorized Ansul Distributor/Dealer* ... this expense is <u>not included</u> with hood purchase.

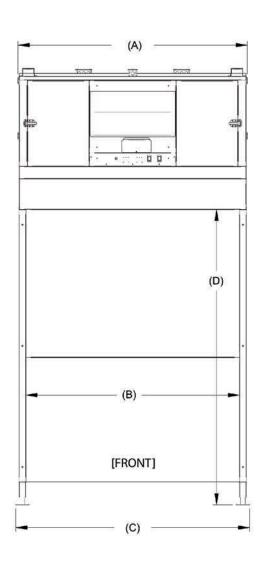
Model: FSH-6

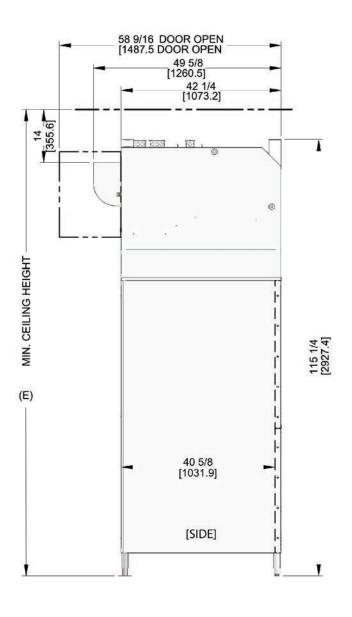
Introduction

1.04 Specifications

1.04.1 Overall Dimensions

Code	Dimension
[A]	72-9/16 [1843]
[B]	68-7/16 [1738]
[c]	73-3/4 [1873]
[D]	72 [1829]
[E]	117-3/16 [2977]





Introduction Model: FSH-6

1.04.2 Agency Certifications







1.04.3 Weights

Hood	Crated Weight	Uncrated Weight (approx)
FSH-6 & Stand	925 lbs [420 kg]	725 lbs [329 kg]

Model: FSH-6 Installation

2. Installation

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

Installation expenses (material & labor) are the sole responsibility of the purchaser. Generally, it is advisable to engage the services of a professional commercial kitchen equipment specialist, licensed electrical contractor, and qualified HVAC contractor to assist with the details of installation. Call Giles Technical Support @ 800.554.4537, if assistance is required.

The hood is factory-assembled with internal fire suppression system components (piping, nozzles, detector link brackets, cable conduit, exhaust fire damper). It is ready for connection to a customer provided fire suppression system specified by the UL listing ... Ansul® R-102 Wet Chemical System. The fire system, field installation, set-up, testing and final commissioning shall be provided for by the purchaser, and must be supplied by an authorized Ansul Distributor/Dealer.

2.01 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 appliances to be placed under the hood are all within the hood's listing limitations, as outlined in Section 2.04 ... C). 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 under the SUPPORT tab on the VENTLESS DOCUMENTS page.

To ensure satisfactory hood performance after installation, the intended site <u>MUST</u> comply with minimum requirements for kitchen size (>600 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 600 sq ft of commercial kitchen space.
- Fresh outside air make-up must be equal to a MINIMUM of fifteen (15) complete room air exchanges per hour.
- Giles makes no representations as to the proper design layout of an establishment in which the ventless hood will be used. Further, Giles does not perform site inspections prior to installation of any units.
- When operating, the hood produces a sound level of approximately 75 dB.

ACAUTION

- DO NOT ALTER, ADD ATTACHMENTS OR OTHERWISE MODIFY THIS EQUIPMENT.
- Failure to comply with installation requirements as specified by the <u>Giles Hood Approval Letter</u> will void the factory warranty.
- 1. A minimum clearance of **14"** (**355.6 mm**) must be maintained between the top of the hood exhaust outlet and the ceiling, or other overhead obstruction.
- <u>DO NOT</u> attach additional ductwork to the exhaust outlet in an attempt to redirect airflow. Back-pressure created can significantly reduce hood capture and result in unsatisfactory performance.
 <u>DO NOT</u> attempt to by-pass the ceiling clearance requirement by directing exhaust air into a ceiling niche, or the space above a suspended ceiling. These actions are considered as improper installations and will void the factory warranty.

Installation Model: FSH-6

2.02 Unpacking

IMPORTANT NOTE!!

If there is evidence of damage to the palletized unit, or any of the accompanying items, immediately and thoroughly inspect the unit and all components. Notify the freight company of all damages. Generally, it is the purchaser's responsibility to file and negotiate freight damage claims with freight carriers.

Unit is shipped on a wooden pallet, secured by high-tensile plastic strapping and wrapped in machine-applied stretch film. In most cases a wooden framework is built around the unit for added protection. Unpack as follows:

- 1. Position pallet in an area that provides adequate space for unpacking.
- 2. Remove the stretch film, strapping and other packaging materials as necessary.
- 3. Carefully remove the hood stand (sides, back panels, trim pieces & appliance channels) from the pallet using suitable equipment, sufficient manpower and safe work practices. Stage all components for assembly.
- 4. Typically, two (2) *stainless baffle filters* will be packed on top of the hood. Secure and place them aside for safekeeping.
- 5. Carefully remove any wooden crating or framework that might be attached.
- 6. Locate and secure the envelope containing *Warranty Card*, documentation and other items needed for installation.
- 7. It is preferable to leave the hood on the pallet so that handling equipment can be used to move it to the desired permanent location after the floor stand is assembled and in place.

ACAUTION

- Hood is very heavy and bulky! Use suitable equipment and/or sufficient manpower to lift and remove it from the shipping skid. See Section 1.04.3, Weights.
- Exercise due care when removing and disposing of packaging materials.
- When moving and handling the hood, take special care to not damage the bottom skirting. Dragging unit along the floor or lifting using the bottom edge can potentially damage the hood skirt.
- Failure to comply with **CAUTION** notices may result in moderate to minor injury, equipment or property damage, and could void the warranty.

2.03 Stand & Hood Assembly

NOTE:

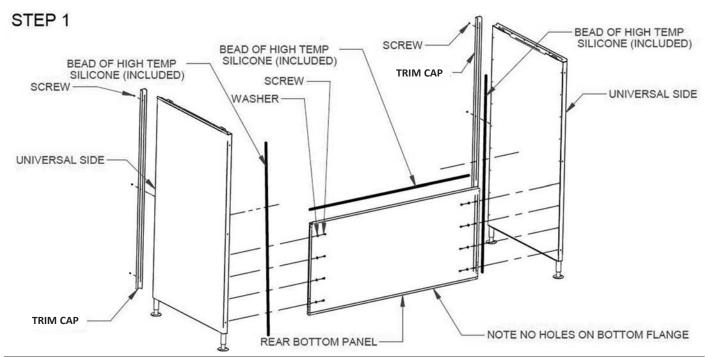
Items needed for stand and hood assembly (fasteners & high-temp silicone) are provided. All other expenses for material, labor, equipment rentals, etc. are the responsibilty of the purchaser ... not included with hood purchase.

IMPORTANT! The hood stand is the only installation method now approved by Giles ... the former "ceiling suspended" installation method is <u>no longer an acceptable option</u>. Attempting to install the hood in such a way can void the factory warranty.

Assemble stand with provided hardware as shown by the following instruction. Use the provided silicone, as shown, to seal gap between panels. Position the stand as close as possible to the final intended operating position, before beginning *step #3*.

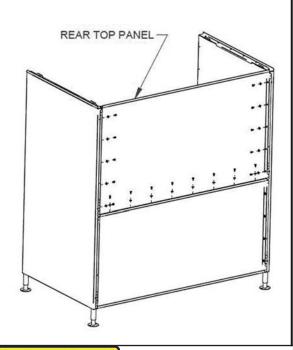
Model: FSH-6 Installation

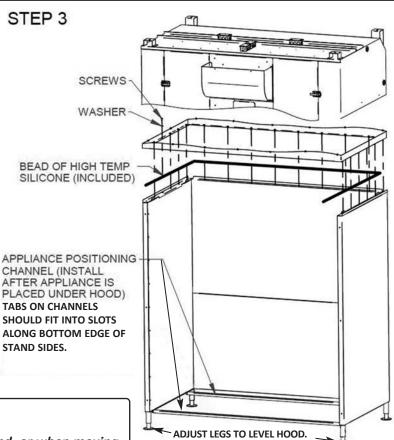
2.03 Stand & Hood Assembly - continued



STEP 2

Install upper back panel.





ANCHOR LEGS TO FLOOR, AS

REQUIRED BY LOCAL CODE.

ACAUTION

Use extreme care when mounting hood onto stand, or when moving the assembled hood & stand into a final position. The assembly is very heavy and will be extremely top-heavy.

Installation Model: FSH-6

2.04 Cooking Appliance Limitations & Clearances

IMPORTANT!

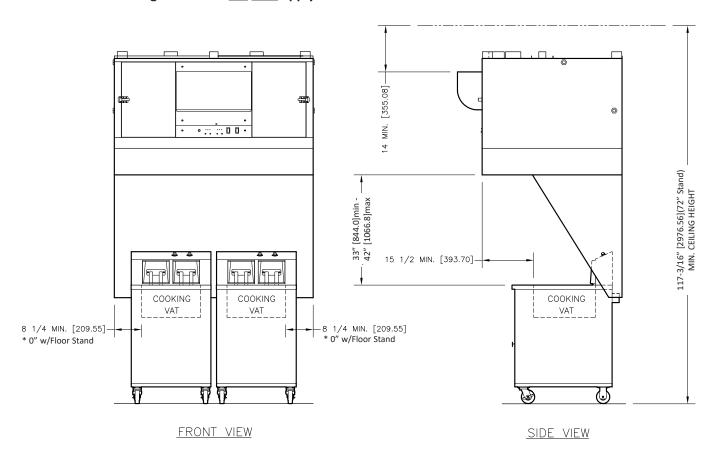
The following clearance diagrams in this section depict "ceiling suspended" hoods over various appliances. **Ceiling** mounting is no longer an acceptable installation method. The "side clearance minimum" dimensions shown in these illustrations will not apply for the free-standing hood versions ... cooking appliances may be placed across the entire width of the hood stand skirt.

2.04.1 Fryer Limitations (Electrically Heated Appliances ONLY)

Hood	Max. Temp.	Max. kW Input	Max. Shortening Capacity	Max Cooking Surface (per Fryer)	Max Cooking Surface (Total)
FSH-6	350°	20 kW / Fryer 40 kW [Total]	80 lbs / Fryer 160 lbs [Total].	380 sq.in.	760 sq.in. [any combination]

2.04.2 Fryer Clearances

^{*} Side-to-side overhang clearances **DO NOT** apply for the floor stand installation.

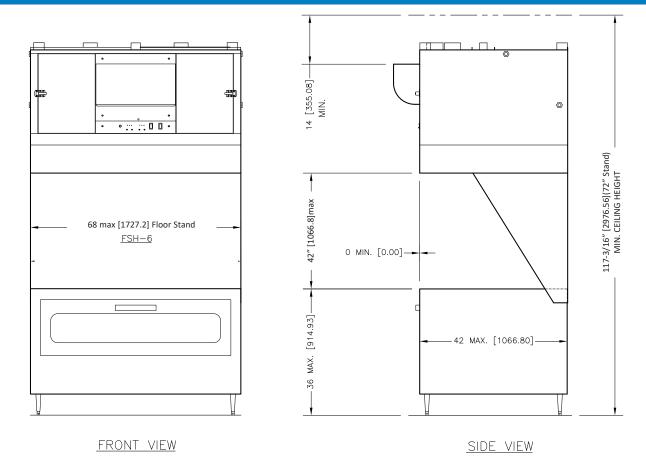


Model: FSH-6 Installation

2.04.3 Oven Limitations (Electrically Heated Appliances ONLY)

Hood	Max. Temp.	Max. kW Input (Total)
FSH-6	500°	55 kW

2.04.4 Oven Clearances



Inches [mm]

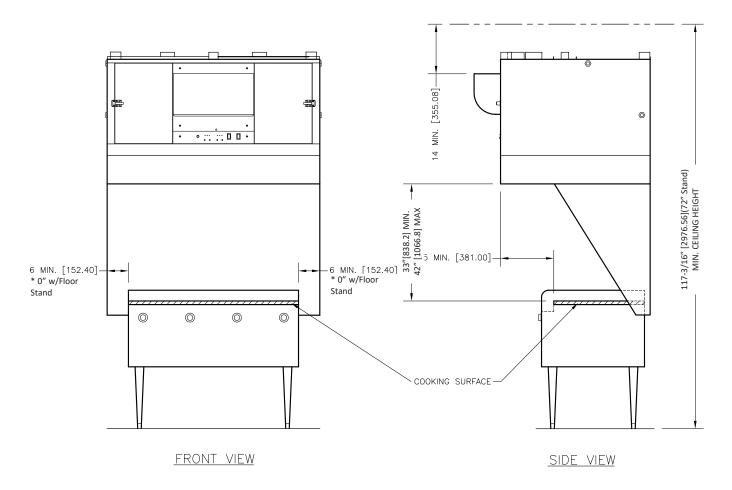
Installation Model: FSH-6

2.04.5 Griddle Limitations (Electrically Heated Appliances ONLY)

Hood	Max. Temp.	Max. kW Input	Max Cooking Surface
FSH-6	400°	25	60 x 26

2.04.6 Griddle Clearances

^{*} Side-to-side overhang clearances **DO NOT** apply for the floor stand installation.



Inches [mm]

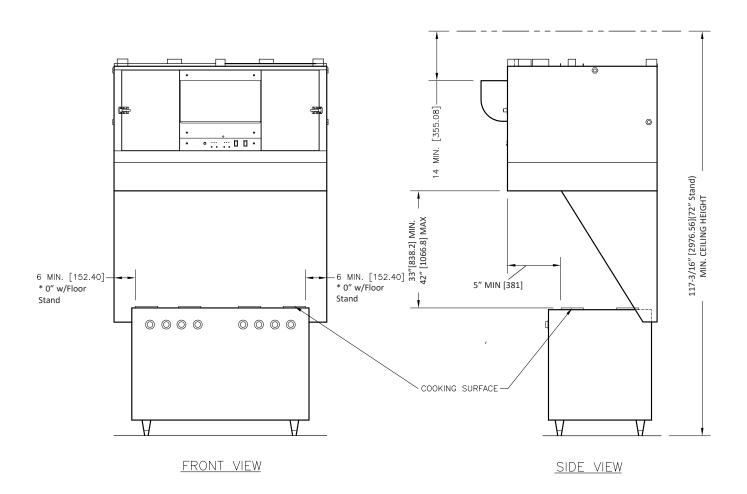
Model: FSH-6 Installation

2.04.7 Range Limitations (Electrically Heated Appliances ONLY)

Hood	Max. Temp.	Max. kW Input	Max Burners
FSH-6	400°	25 kW	8

2.04.8 Range Clearances

* Side-to-side overhang clearances **DO NOT** apply for the floor stand installation.



Inches [mm]

Installation Model: FSH-6

2.05 Electrical Specifications - Hood ONLY

AWARNING

• 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</u>, <u>ANSI/NFPA 70</u>. Improper grounding may result in electrical shock to users. Check local electrical code to ensure that proper grounding is applied.

- Always consult a certified electrical contractor, or other qualified service technician, prior to installation to ensure that electrical circuits are of sufficient rating for the hood and appliance load.
- Improper installation, adjustment, alteration, service or maintenance could result in serious injury or possible death, equipment or property damage, and could void the warranty.

Electrical Specifications (Hood Only)					
Unit	Voltage	Hz	Phase	Amps	Breaker
FSH-6	208-240	60	1	8	10

IMPORTANT!

- Hood is designed to operate with either 208V or 240V supply power.
- Breaker size shown applies to <u>hood power only</u>. Under-hood appliances are to be powered by separate circuits interlocked through a relay which is controlled through the hood circuitry, such that appliances will not be powered unless the hood is running properly.

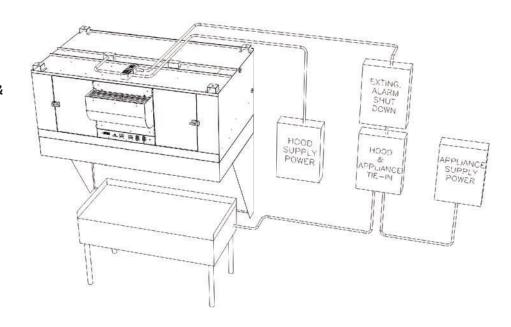
2.05.1 Electrical Connections

- 1. Install appropriate circuit breaker in main electrical panel, see **Section 2.05**, **Electrical Specifications**.
- 2. As required by code, route suitable sized flexible conduit from main panel to service box on hood top and attach using appropriate connectors. See *Section 2.05.2, Routing Conduit & Wiring*.
- 3. Pull appropriately sized wire from the electrical panel to the hood service box. Securely connect power supply wires to the proper terminal blocks inside the service box and reinstall cover.
- 4. Turn ON breaker supplying power to the Hood.
- 5. Press and hold in the top [START] portion of the POWER switch for a few seconds, release when the hood fan starts running. Switch will spring back and remain in the [ON] position. An alarm may briefly sound until the hood fan reaches full speed.
- 6. Place **POWER** switch in the **[OFF]** position and continue installation.
- 7. **Section 2.05.3** shows detail for connecting the appliance power supply through a hood interlocked relay.

2.05.2 Routing Power Conduit & Wiring

- This diagram shows a typical conduit and wiring setup for connecting hood and appliance power.
- See Section 2.05.3, Hood & Appliance Interlock
 Diagram for details on setting up the interlock circuit for the under-Hood appliances.

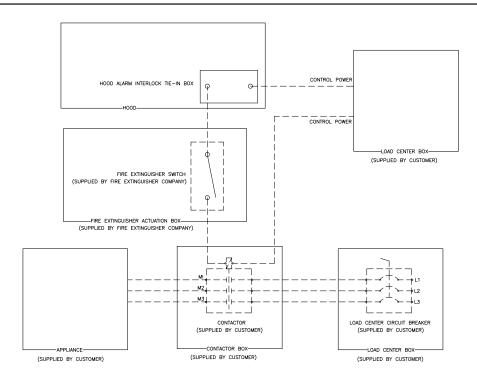
Once properly connected, cooking appliances should not receive service power unless hood is running properly.



2.05.3 Hood & Appliance Interlock Diagram

IMPORTANT!

Failure to interlock cooking appliances with the hood, such that appliances are not powered unless the hood is operating is **not compliant with the hood's UL listing** and may also be in violation of local building, fire and health codes. Appliances under the hood must be interlocked as shown below.



Installation Model: FSH-6

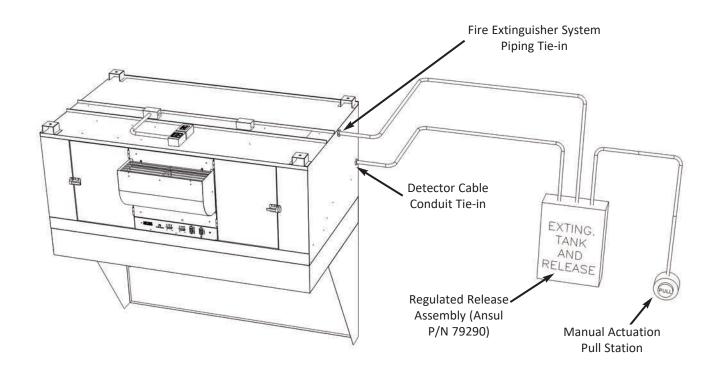
2.06 Fire Suppression System Installation

Giles ventless hoods must be protected by the *Ansul® R-102 Restaurant Fire Suppression System* in accordance with the hood listing. Hood includes factory-installed piping, plenum discharge nozzles (appliance drop-downs & nozzles not included), detector link brackets, and cable conduit. Piping and conduit are stubbed out on either side of hood, ready for connection of the fire suppression system. Procurement of the fire system, field installation, set-up, testing and certification is the responsibility of the purchaser (NOT included with hood). System and installation must be provided by an authorized Ansul® Distributor/Dealer.

- 1. Appliance nozzles shall be positioned 11" [279.4 mm] below the lowermost front edge of the hood.
- 2. Both appliance nozzles must be installed and in place at all times.
- 3. A manual activation station for the fire system (NOT included) shall be installed in a conspicuous location in the path of egress (exit) from the area. The pull station must be clearly marked and easily accessible.
- 4. The regulated *release mechanism* with a 3-gal suppressant storage tank shall be the mechanical type ... *Ansul® Automan #79290*.
- 5. Installation, operation and maintenance of the FSH-6 hood must comply with the **Standard for Ventilation Control & Fire Protection of Commercial Cooking Operations, NFPA 96.**

2.06.1 Fire Suppression System Connection

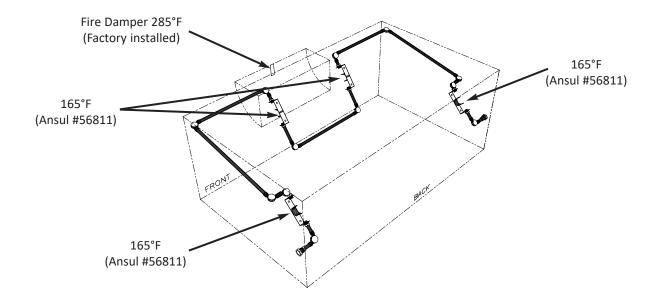
NOTE: Suppression system may be connected on either left or right side of hood. Connection and set-up of the system must be performed and certified by an authorized Ansul service agent.



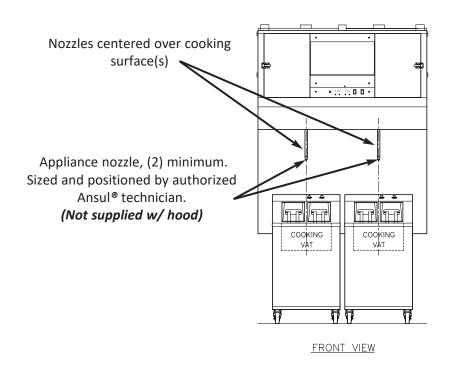
Model: FSH-6 Installation

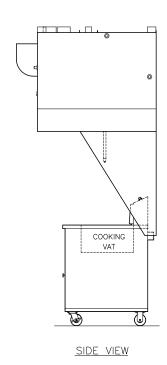
2.06.2 Fire Suppression Detector Links & Location

All fusible detector links shall be supplied & installed by an authorized Ansul® technician.



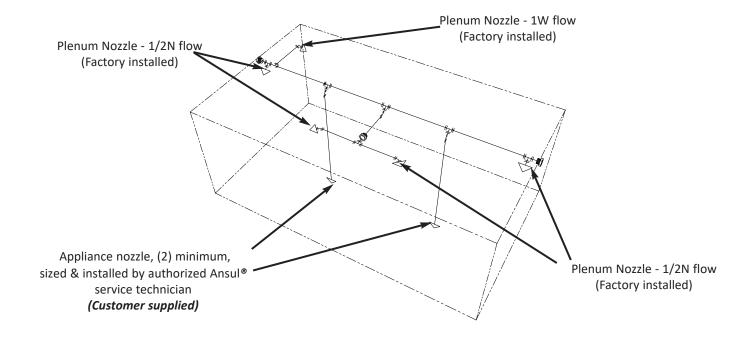
2.06.3 Appliance Nozzles





Installation Model: FSH-6

2.06.4 Fire Extinguisher Nozzle Locations

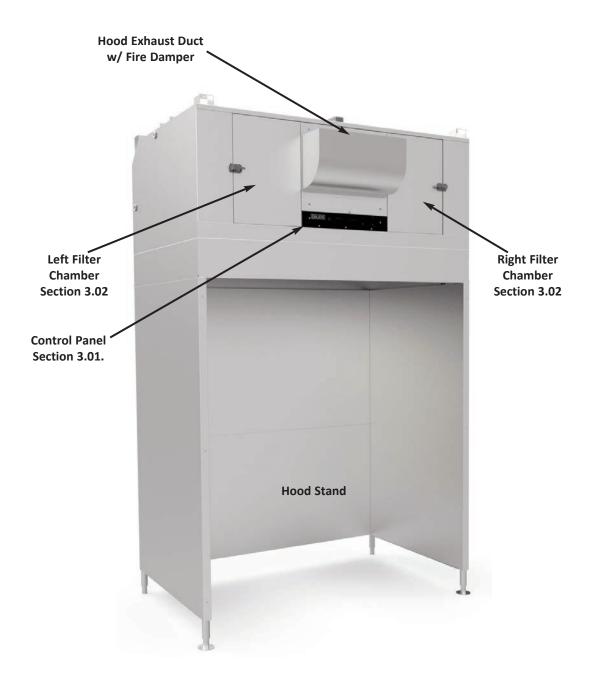


Model: FSH-6 Installation

Overview Model: FSH-6

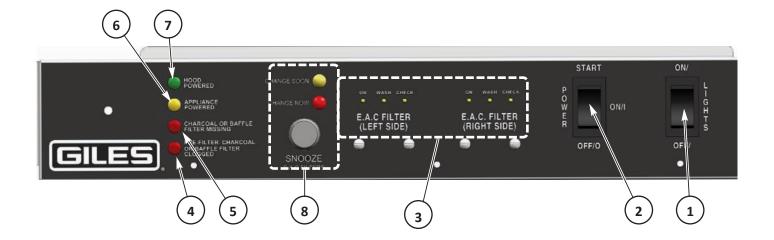
3. Overview

This section provides a brief overview of the hood's components, functions, and accessories. Please review carefully before proceeding.



Model: FSH-6 Overview

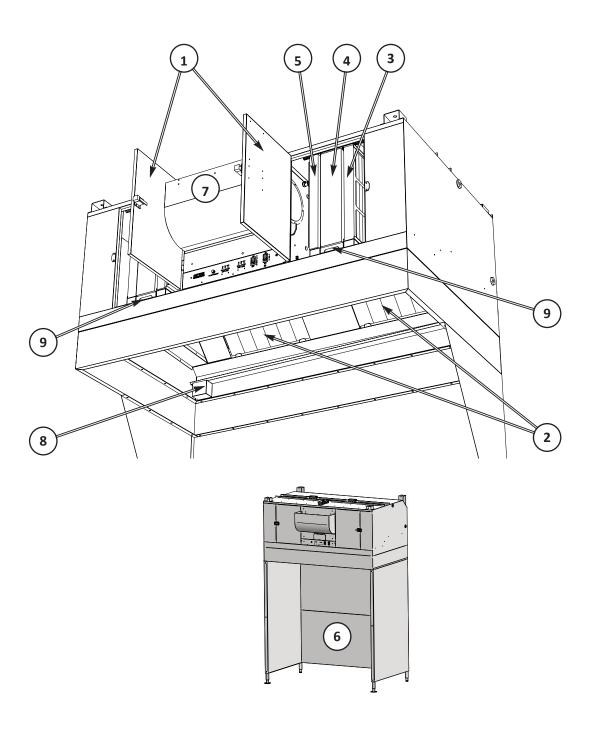
3.01 Control Panel



3.01	Control Panel	
Item	Description	Function
1	Light Switch	Controls under-hood lighting.
2	POWER Switch "PUSH-TO-START"	Press and momentarily hold the top [START] portion of switch to start hood and provide power to cooking appliances. Release & switch remains in the [ON] position (center). To turn hood OFF & shutdown power to appliances, press the bottom of switch. Hood must be restarted with switch after any power interruption.
3	E.A.C. Filter Status Indicators ON WASH CHECK	LED lights indicate the status of the Electronic Air Cleaner (E.A.C.) on each side of the hood. [ON] - Turns ON when hood is powered. Indicates that the E.A.C. system is powered and functioning normally to clean the air. Should be only light is ON during normal operation. [WASH] - Indicates either excessive grease build-up on collector fins (dirty), collector cell not in place, poor contact, missing ionizer wires, etc. Approx. 2 minutes after this light turns ON, a beeping tone alarm will begin sounding and power to cooking appliances will be shutdown. IMPORTANT! Do not rely on this indicator as a signal for routine cleaning cell must be cleaned daily to maintain peak performance & extend the useful life of charcoal filters. [CHECK] - Indicates that collector cell has stopped operating properly either damaged & shorted to ground, fins are shorted due to excessive moisture, etc. No alarm sounds & the appliances remain powered, but air leaning system is not functioning. DO NOT continue operation check system & determine cause.
4	CLOGGED FILTER Light	Turns ON if a filter (baffle, pre-filter, or charcoal filter) is excessively dirty and restricting airflow through hood. Other obstructions, such as blocked exhaust, may also be present. A constant (steady) alarm will sound.
5	FILTER MISSING Light	Turns ON to indicated that a required filter (baffle, pre-filter, charcoal) is missing or installed improperly. No alarm sounds.
6	APPLIANCE POWERED Light	Turns ON to indicate that power is being supplied to cooking appliances under the hood. When light turns OFF while the hood is powered, there is typically a an alarm condition that has disabled appliance power.
7	HOOD POWERED Light	Turns ON indicating the hood is powered.
8	E.A.C. Cleaning Timer CHANGE SOON CHANGE NOW SNOOZE	Cleaning reminder system that helps user properly maintain the electronic air cleaner (E.A.C.) collector cells for optimum performance. [CHANGE SOON] - Turns ON when timer enters [WARNING] mode, indicating that the collector cells must be cleaned within the next 24 hours. [CHANGE NOW] - Turns ON when timer enters [TIMEOUT] mode, indicating that the maximum time between cleanings has expired. Cells must be cleaned immediately. A constant tone alarm sounds and will remain ON until cleaning is performed timer resets automatically after cleaning is performed. [SNOOZE] - After entering [TIMEOUT] mode, pressing this button temporarily returns timer to [WARNING] mode and silences alarm for two (2) hours only two (2) [SNOOZE] periods can be used.

Model: FSH-6 Overview

3.02 Filter Chamber & Exhaust



^{*} Not shown

Overview Model: FSH-6

3.02	Filter Chamber & Exhaust		
Item	Description	Function	
1	Hood Filter Door (2)	Provides access to filter chamber & hood filters (pre-filter, E.A.C. cell & charcoal). Both doors must be closed and latched before the hood will operate.	
2	Baffle Filter (2)	The first stage of ventless air cleaning system. Stainless steel baffles capture largest grease particulate filters easy to remove for cleaning. <i>Baffle filters should be cleaned daily</i> .	
3	Pre-Filter (2)	Single-use, disposable fiber filters remove moisture and some additional grease-laden vapor from the air stream. Helps to keep the E.A.C. cells performing effectively. <i>NEVER attempt to clean and reuse pre-filters replace every 7-10 days with fresh NEW</i> .	
4	E.A.C. Filter Cells (2) (Left & Right)	E.A.C. collector cells are sustainable electrostatic devices that remove fine particulate grease-laden vapor and smoke generated by the cooking appliances. To maintain peak performance, E.A.C. cells must be cleaned <u>DAILY</u> as described later in this manual.	
5	Charcoal Filter (2)	Single-use, disposable filters that help to control cooking aromas in exhausted air. Filters must be replaced periodically. NEVER attempt to clean and re-use charcoal filters Typically, replace with fresh NEW filters every 30 to 45 days. Replacement cycle is dependent on appliances in use, cooking activity and type of foods being cooked.	
		NO FILTER WILL COMPLETELY REMOVE COOKING ODORS.	
6	Hood Stand	Hood mounts onto a full skirt, self-supporting floor stand. Facilitates performance for capturing grease-laden cooking vapor and allows you to utilize the full width of the hood, without side clearance limitations.	
7	Exhaust Outlet	Directs cleaned air back into the space. A minimum clearance of 14" MUST be maintained between the top of the exhaust duct outlet and ceiling, or other obstruction. DO NOT attempt to direct exhaust into a different space by attaching any type ductwork back-pressure will cause poor performance.	
8	Grease Drip Cup	Catches and collects grease condensate generated at the baffle filters. Cup should be emptied and cleaned daily.	
9	E.A.C. Drip Pan (2)	Catches and collects grease residue which may drip from E.A.C. collector cells. Inspect daily empty and clean as needed.	

^{*} Not shown

Model: FSH-6 Overview

3.03 Accessory Items Included w/Hood

Part	Description/Part Number	Function	
	Baffle Filter (2) P/N 42300	Captures largest grease particulate in cooking vapors.	
	Pre-Filter (2) P/N 91707	Removes additional grease-laden vapor and moisture from the air. Single-use only, disposable, must be replaced.	
	E.A.C. Filter Cell P/N 20521 (Left Side) P/N 20520 (Right Side)	Captures fine grease particulates and some smoke contaminant from the air. Sustainable, must be cleaned DAILY .	

Overview Model: FSH-6

3.03 Accessory Items Included w/Hood - continued

Part	Description/Part Number	Function
	Charcoal Filter (2) P/N 32056	Helps to control cooking aromas in the exhausted air. NOTE: Probably will not remove odor completely.
FOAMING CRYSTAL SIMPLE OFEEN MISSIFIE GEARLE MISSIFIE TO THE TO	(2) Sample Cans Foaming Crystal Cleaner/Degreaser P/N 41510 12-count Case NSF approved	GILES recommended collector cell cleaner. Spray on foaming degreaser for cleaning EAC collector cells. Cleaner is readily available from Giles and on-line distributors, as well as many nationwide retail outlets.

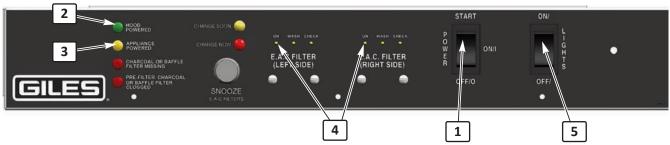
Model: FSH-6 Overview

Operation & Filter Maintenance

4. Operation & Filter Maintenance

4.01 Starting the Hood

Be sure that all filters are in place and access doors are closed and latched securely before attempting to start the hood. *The hood will NOT power-up if either access door is open, or ajar.*



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 springs back & remain ON. Green HOOD POWERED light ② should turn ON.
- 2. An alarm may sound briefly until the hood blower reaches full speed, then the amber **APPLIANCE POWERED** light ③ should turn ON. Cooking appliances under the hood should now be receiving power and ready for use.
- 3. Both **E.A.C. FILTER [ON]** lights **4** should turn ON.
- 4. Place **LIGHT** switch (5) in the **[ON]** position to turn on the under-hood lighting.

To Shutdown the Hood:

- 1. Press the bottom [OFF] portion of the POWER switch (1).
- 2 Blower stops and all indicator lights should turn OFF.
- 3. Power to the cooking appliances is shutdown.

4.02 Filter System - Maintenance & Alarms

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 4.04.1	Section 4.02.3
Pre-Filter	Replace every 7 to 10 days	Section 4.02.4	<u>DO NOT</u> attempt to clean; <u>ONLY</u> replace! Section 4.03.4	Section 4.02.5
E.A.C. Collector Cell	Clean daily	Section 4.02.6	Section 4.04.2	Section 4.02.7
Charcoal Filter	Replace every 30 to 40 days,	Section 4.02.8	<u>DO NOT</u> attempt to clean; <u>ONLY</u> replace! Section 4.03.5	Section 4.02.9

Model: FSH-6

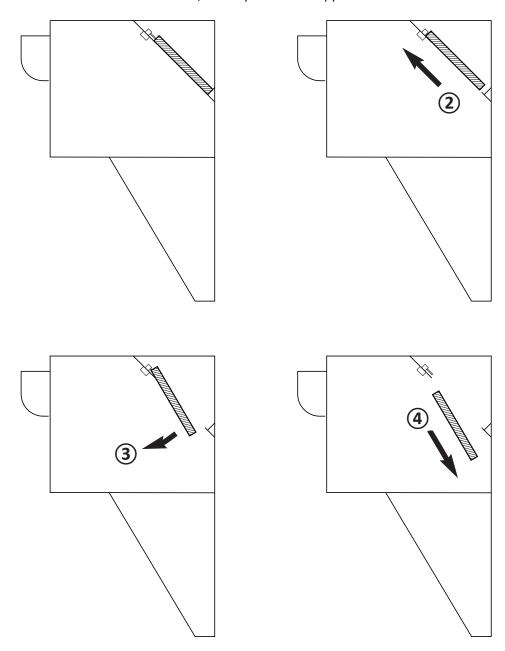
Model: FSH-6

Operation & Filter Maintenance

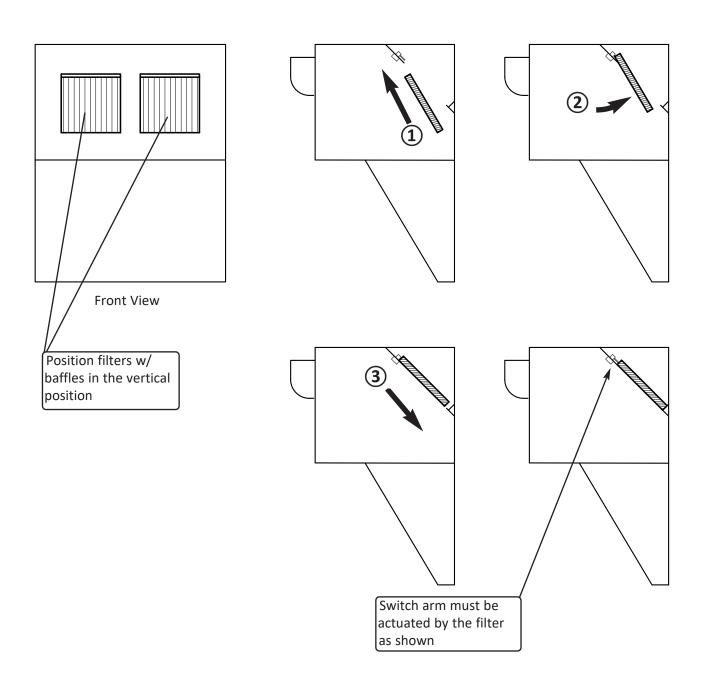
4.02.2 Baffle Filter Removal



Baffle filters are located on under-side of hood, directly above the appliances.



4.02.3 Baffle Filter Installation

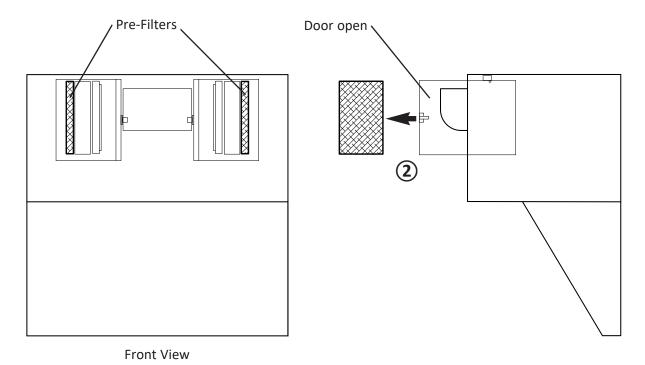


Operation & Filter Maintenance

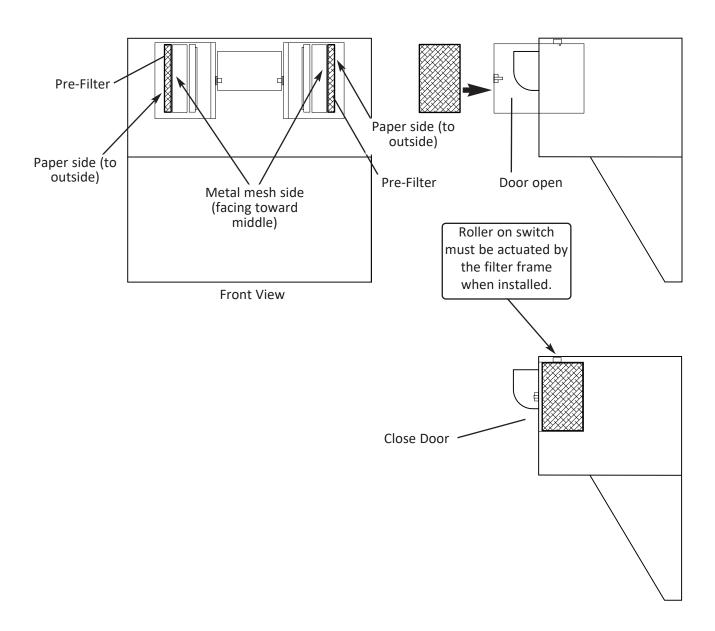
4.02.4 Pre-Filter Removal



Pre-filters are located inside the filter chamber in the outermost position on each side.



4.02.5 Pre-Filter Installation



NOTE:

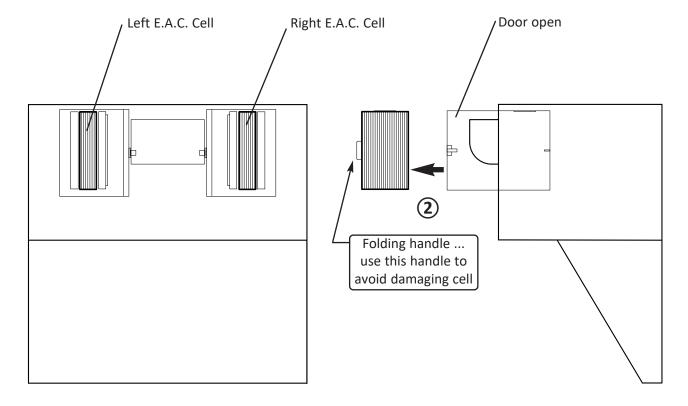
When filters are changed, always record the installation date of the new filter in the space provided on the label.

Operation & Filter Maintenance

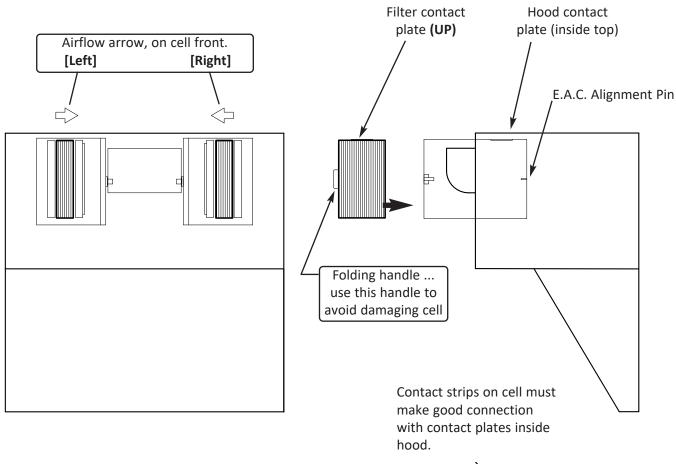
4.02.6 E.A.C. Collector Cell Removal



Collector cells are located inside the filter chamber in the middle position on each side.



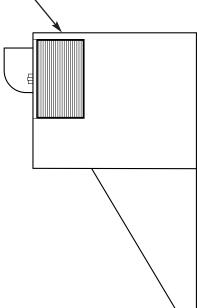
4.02.7 E.A.C. Collector Cell Installation



IMPORTANT!

Collector cells are side-specific. Always take care when installing to avoid improper positioning. Contact plates of both cells must be positioned toward top of hood when inserted, and airflow arrows must point toward the hood center.

If cell does not engage the alignment pin and slide fully into the hood, it is NOT positioned properly.

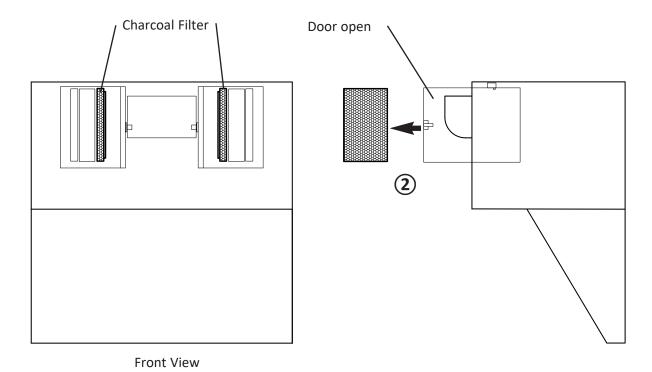


Operation & Filter Maintenance

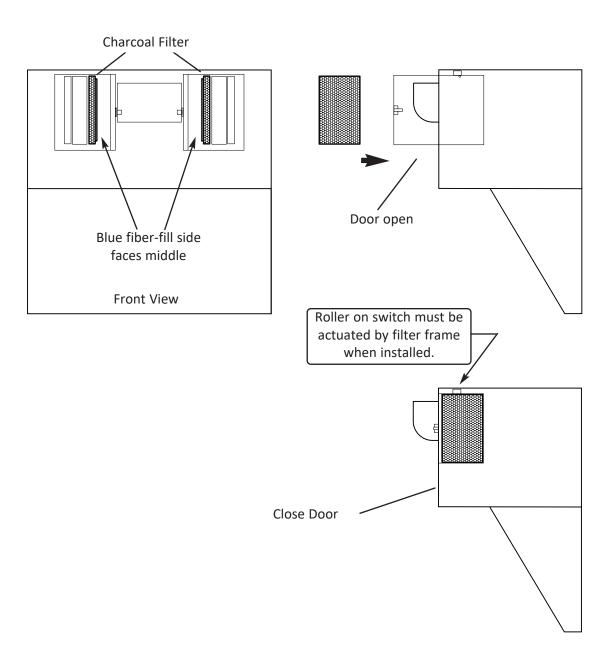
4.02.8 Charcoal Filter Removal



Charcoal filters are located inside the filter chamber in the innermost position on each side.



4.02.9 Charcoal Filter Installation



Operation & Filter Maintenance

4.03 Hood Filter Alarms

4.03.1 Baffle, Pre-Filter or Charcoal Filter Missing

If a baffle, fiber, or charcoal filter is not in place, or possibly not positioned correctly, the red [CHARCOAL OR BAFFLE FILTER MISSING] light will turn ON. Power to cooking appliances under the hood is turned OFF until the condition is corrected. No audible alarm will sound.

- Hood fan will continue to run.
- Confirm that all filters are in place. See **Sections 4.02.3 4.02.5 4.02.9**, **Filter Installations.**
- You may try removing and reinstalling the filters, to ensure that
 they are seated properly in guides and are placed fully into the
 compartment so that doors close properly. Each filter must also
 actuate proofing switches ... charcoal & pre-filter switches are in the
 top guide channels ... baffle filter switches are located in the filter
 rack underneath hood.
- If the condition persists, call for service.



4.03.2 Baffle, Pre-Filter or Charcoal Filter Clogged

A clogged filter alarm will occur if airflow through hood is reduced to a level that is below the minimum required for effective capture of cooking vapors. The red [PRE-FILTER, CHARCOAL OR BAFFLE FILTER CLOGGED] light turns ON & a constant tone audible alarm will sound ... power to cooking appliances under the hood is turned OFF until the condition is corrected. This alarm is most commonly caused by clogged pre-filters or charcoal filters ... other conditions can also cause this alarm.

- · Hood fan will continue to run.
- Clean the baffle filters, Section 4.04.1, Baffle Filter Cleaning.
- Replace charcoal or pre-filters with fresh new filter, Section 4.03.4,
 Pre-Filter Maintenance and 4.03.5, Charcoal Filter Maintenance.
- Inspect inside the hood plenum to ensure that there are no obstructions present.
- Check the hood exhaust outlet and be sure that nothing is blocking or obstructing it.
- Inspect both sides of the hood blower. Excessive accumulation of grease residue on fan blades can reduce airflow. Clean the blades if needed.
- If the condition persists, call for service.



4.03.3 E.A.C. Filter Status & Alarm

Two LED indicator light clusters on the control panel show the operational status of the *electronic air cleaner (EAC)* system on each side of the hood.

[ON] Indicates that the EAC collector cell is installed, powered and operating. When system is operating normally, this is the *only* light ON.



Model: FSH-6

[WASH] This light turns ON to indicate:

- Filter cell is not installed or is mis-aligned.
- Collection fins contain an excessive amount of captured grease residue.
- There is poor connection between the filter cell contact plate & the hood contacts.
- Too many ionizer wires on cell are broken or missing.

When **[WASH]** light is ON, an alarm condition exists and air cleaning has stopped. After approximately two (2) minutes, a beeping tone alarm will begin to sound and shortly thereafter, power to the cooking appliances under the hood is shutdown.

IMPORTANT! [WASH] light is <u>NOT</u> intented to be a signal for routine cleaning of the cells, <u>DO NOT USE</u> **AS SUCH**. Typically, the collection cells must be cleaned <u>DAILY</u> to ensure optimum air cleaning performance. See **Section 4.04.2**, **EAC Filter Cell Cleaning**.

[CHECK] This light turns ON to indicate:

- An ionizer wire is broken & shorting out against the cell frame.
- Cell is damaged & has shorted out to ground.
- Collection fins are shorted because of excessive moisture.

When [CHECK] light is ON, system is no longer operating to clean the air, even though the hood continues to run and the cooking appliances are still receiving power. DO NOT CONTINUE TO OPERATE HOOD WHEN THIS CONDITION EXIST, DAMAGE TO SYSTEM CAN OCCUR ... DETERMINE THE CAUSE AND CORRECT!

NOTE: If no LED lights turn ON when hood is started, the EAC power supply may be faulty ... call for service.

The following actions may clear an EAC alarm condition:

- 1. Turn OFF hood **POWER** switch.
- 2. Remove the EAC collector cells and clean as described in **Section 4.04.2**.
- 3. Inspect cells for broken & missing ionizer wires, bent fins, or other damage. Ionizer wires are replaceable (specify 20" when ordering replacements). Bent fins may be straightened gently by hand so that no fin is touching an adjacent one. A cell with excessive damage (broken or badly bent frame, broken insulators, etc) must be replaced.
- 4. Inspect cells for moisture on fins ... if present, allow cell to dry thoroughly before reinstalling.
- 5. Inspect the EAC contact plates inside hood compartment. Clean grease accumulation away with a mild degreasing cleaner and dry thoroughly.
- 6. Replace collector cells (**Section 4.02.7**) and restart hood (**Section 4.01**). If the condition persist, contact a qualified service agent.

4.04 Filter Maintenance

The following sections explain the procedures for cleaning & maintaining ventless hood filters. Diligent adherence to these procedures is essential for maintaining optimum and satisfactory Hood performance.

Operation & Filter Maintenance

4.04.1 Baffle Filter Cleaning



The stainless steel baffle filters are fabricated from thin gauge sheet metal that has potential to present sharp edges. Exercise due care when handling and cleaning the filters to avoid injury. *Recommended to wear heavy-duty rubber gloves as precaution*.

Ideally, grease baffle filters should be cleaned daily. Remove and clean in sink with a mild, bio-degradable, degreasing cleaner (Giles recommends using Simple Green® Crystal Foaming Spray Cleaner). Rinse and dry thoroughly. Reinstall dry filters in the unit. Generally, these filters may also be washed in a dishwasher. Ensure that filters are completely dry before reinstalling in the hood. NEVER PLACE A WET FILTER INTO THE HOOD!

4.04.2 E.A.C. Collector Cell Cleaning



The EAC collector cell contains parts fabricated from thin gauge sheet metal that has potential to present sharp edges, which may cause cuts if not handled properly. To avoid injury, exercise due care when handling and cleaning the cells. *Recommended to wear heavy-duty rubber gloves as precaution*.

The EAC collector cell is sustainable and 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 cooking appliance operation, premature failure of the electronic cleaning system, or reduced useful life of consumable charcoal filters. Effective cleaning procedures are explained in the following sections.

IMPORTANT: The cell <u>CANNOT</u> withstand washing in commercial dishwashing equipment ... some commercial cleaners & detergents will cause oxidation and create a layer of contamination on the aluminum collection fins that can lead to system malfunction and result in an interruption of power to cooking appliances under the hood.

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

• <u>Preferred</u>: Spray foam method using Simple Green® Crystal Foaming Spray Cleaner/Degreaser ... an exceptionally effective foaming spray cleaner. It is readily available as well as being safe for use on aluminum (NSF approved, food-grade, non-toxic, and biodegradable). Cleaning the collector cell is quick & easy using this convenient ready-to-use cleaner. A complimentary sample is supplied with new equipment and it is availabel from Giles, item #41510 (12-count case), as well as multiple retail outlets. When used as directed, a case of the cleaner should lasr approximately 4 to 5 weeks, depending on equipment model and cleaning protocols.



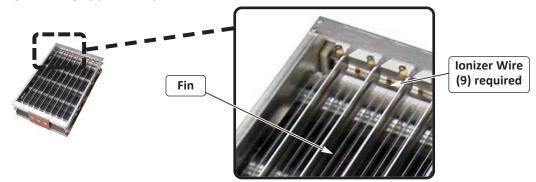
• <u>Alternative</u>: *Soak method* using a diluted solution of *Simple Green® Pro-HD* and water. Although not as convenient as the spray method and requiring more planning and time, this procedure has proven to be very satisfactory for cleaning collector cells for many years. This product has the same characteristics of the spray product, but requires mixing with water before use ... *dilution factor is 1:12*, e.g. mix 1/2 gal. cleaner with 6 gals. of water.

With proper care, cleaning, and handling, the EAC collector cell is designed to provide years of service.

4.04.2 E.A.C. Collector Cell Cleaning - continued

CAUTION

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

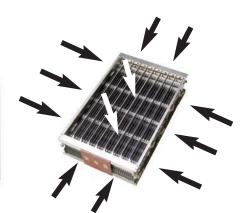


Damage from abusive handling and/or improper maintenance may not be covered by the factory warranty.

A. Preferred Cleaning Method - Spray Cleaner

- 1. Remove collector cells from hood (see *Section 4.02.6*) and lay on a drain board, or other suitable surface.
- 2. Hold can at an appropriate distance & spray Simple Green® Crystal Foaming Degreaser onto cell, completely covering all surfaces ... collection fins, contact plate, brass fittings & inside corners of the frame. Turn cell over and apply cleaner to the other side in like manner, ensuring that both sides of all collector fins are completely covered with 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 cells to sink and rinse thoroughly, using hot water spray. *Rinse ONLY, DO NOT scrub with brushes.*
- Stand cells upright on end on a drain board, w/contact plate up ... allow to drain and air dry overnight. Cells must be completely dry before being replaced in hood.
 If desired, a small electric fan blowing across the cell can help expedite drying.
- Before replacing cells 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 ones.

IMPORTANT! ONLY <u>Simple Green® Crystal Foaming Cleaner/Degreaser</u> is recommended by GILES for cleaning cells in this manner. Other cleaners can contain corrosive ingredients that may damage the metal and cause the cell to fail or not perform properly. Such damages are not covered by the factory warranty.







Operation & Filter Maintenance

4.04.2 E.A.C. Collector Cell Cleaning - continued

B. Alternate Cleaning Method - Soaking

The factory-recommended product to use for cleaning EAC cells in this manner is **Simple Green® Pro-HD.** It is a readily available, biodegradable, non-toxic degreasing cleaner that is safe 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).

<u>DO NOT use DISHWASHING DETERGENTS or CORROSIVE CLEANERS</u> as they can contain ingredients that may damage the metal and cause failure or unsatisfactory performance. Such damages are not covered by the factory warranty.

1. This 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 degreasing solution to submerge it completely for soaking, regardless of orientation.



2. Fill container with fresh water to a level that will basically cover the cell. Measure the water as container is filled and note the quantity. Add *Simple Green® Pro-HD* in the *ratio of 1:12* to the water *(e.g. <u>8 gals.</u> of water requires <u>85-1/2 ozs.</u> degreaser. Stir solution well to mix.*

* NOTE: The GILES soak tank (purchased separately, Item# 91123) is specifically designed & sized for soaking the EAC 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, hold it by the contact plate, frame, or handle and carefully place it into the solution. Be sure that it is fully submerged ... add water if needed.
- 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:

Degreasing solution can be used multiple times ... place a suitable cover on container when not in use to prevent contamination. Discard & mix new solution when a greasy film remains visible, floating on the liquid.

4.04.3 E.A.C. Collector Cell Cleaning Timer

The hood features an *E.A.C. Collector Cell Cleaning Timer*. It is designed to help users maintain a proper cleaning routine for the collector cells. Timely cleaning is essential to ensure that hood continues to effectively remove grease-laden cooking vapors.

Timer alerts user that it is time to clean the collector cells (or alternatively, exchange with ones cleaned previously). If the task is not completed within a preset allowed time, timer expires, an alarm is sounded & power to cooking appliances is shutdown. Alarm condition exist until cleaning has been completed. After filter maintenance is performed, the alarm condition is reset & timer automatically begins a new countdown.

Should the alarm condition occur during an inopportune time or while cooking is in progress, a **SNOOZE** feature is provided to temporarily the timer for a short period. Timer indicators & **[SNOOZE]** button are located on the control panel.

Continued on Next Page

4.04.3 E.A.C. Collector Cell Cleaning Timer - continued

Timer Operation:

1 CHANGE SOON

The amber indicator light turns ON when timer enters [WARNING] mode ... no audible alarm will sound at this time. If collector cells are cleaned (or exchanged with clean) within the next 24 hours, the timer will automatically reset and start a new countdown.

2 CHANGE NOW

If no action is taken within the allowed time, the timer enters [TIMEOUT] mode, the red indicator light

turns ON and an audible alarm sounds to signal that allowed time between cleanings has expired. The alarm condition will continue until cleaning activities are performed, or the [SNOOZE] button is pressed, see #3 below. Placing the hood POWER switch in the [OFF] position will silence the alarm ... but it will sound again & hood will not start if switch is returned to [ON], unless cleaning (or exchange) has been completed.



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3 SNOOZE Button

In the event that **[TIMEOUT]** occurred during an inopportune time, or while cooking is in progress, pressing the **[SNOOZE]** button will temporarily reset the timer to **[WARNING]** mode for a period of *two (2) hours*.

Snooze can only be used <u>twice</u>. During a second period, the [CHANGE SOON] light flashes to indicate final snooze period. After using the second snooze period, the alarm condition will exist until the EAC collector cells are cleaned (or exchanged with clean) and the timer automatically resets.

4.04.4 Pre-Filter Maintenance

CAUTION

Pre-Filters are single-use, disposable fiber filters. <u>NEVER</u> attempt to clean and reuse these filters ... doing so can cause damage to the unit.

Typically, pre-filters should be replaced <u>weekly</u> (see **Sections 4.02.4 & 4.02.5**). They **CANNOT** be cleaned and are not intended for long-term use.

Use GILES replacement Item No. 91707. Write the replacement date on new filter.

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

Operation & Filter Maintenance

4.03.5 Charcoal Filter Maintenance

CAUTION

Charcoal filters are single-use, disposable filters. <u>NEVER</u> attempt to clean and reuse ... doing so can cause damage to the unit.

Charcoal filters are consumable items which must be replaced periodically (see **Sections 4.02.8 & 4.02.9**). These **CANNOT** be cleaned and reused. Typical replacement cycle is every **30** to **40** days, depending on usage.

Use GILES replacement Item No. 32056. Write the replacement date on new filter.

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

Hood Cleaning & Maintenance

5. Hood Cleaning & Maintenance

This section describes the steps to generally maintain and clean *FSH-6 Hoods*. Attention to these procedures will help ensure the Hood remains in satisfactory operating condition and continues to run efficiently and safely.

A Maintenance & Service Log is provided, see Section 5.04.

5.01 Monthly Hood Interlock Inspection (Can be Performed by User)

The hood design incorporates a series of interlock switches to ensure that the unit will shutdown when conditions exist that are not consistent with safe and effective operation. These interlocks should be tested **MONTHLY** as described below. Use the **Maintenance & Service Log** to record completion of the test. If problems are detected, contact *GILES* or an authorized service provider. **NOTE:** Anytime a filter access door is opened and closed, the hood must be restarted with the power switch.

- 1. <u>Door Interlock Test</u>: Start hood ... with hood running, unlatch and slightly open each access door, one at a time. When each side is opened, confirm that hood powers OFF and cooking appliances under the hood cannot be turned ON.
- 2. <u>Baffle Filter Test</u>: Remove the *baffle filter* from one side ... start hood. Verify that the red [FILTER MISSING] light turns ON. Check to ensure that cooking appliances under hood will not turn ON. Replace filter & repeat the test on the other side. See *Sections 4.02.2 & 4.02.3, Removal & Installation*.
- 3. <u>Pre-Filter/Charcoal Filter Test</u>: Same procedure as #2 except perform for each pre-filter and charcoal filter, one at a time in succession. Reinstall the filters. See Sections 4.02.4, 4.02.5, 4.02.8 & 4.02.9, Removal & Installation.
- 3. <u>E.A.C. Filter Test</u>: Remove one of the EAC collector cells, close & latch door ... start hood. Verify that [WASH] light on EAC Status comes ON for the side without cell. Wait approx. two (2) minutes. A beeping alarm should begin sounding ... after a few seconds, check to ensure that cooking appliances under hood cannot be turned ON. Turn off hood, reinstall cell, and repeat for other side. See *Section 4.02.6. & 4.02.7*, *Removal & Installation*.
- 4. Filter Clogged Test: Perform this test ONLY after installing new prefilters & charcoal filters. Start hood normally and allow to run. Use cardboard, or other suitable material, and completely block the hood exhaust outlet ... hold firmly in place so that no air is escaping. Within a few seconds, a continuous tone alarm should begin sounding. Check to ensure that cooking appliances under hood cannot be turned ON. Remove the obstruction ... the alarm should silence and you should be able to turn ON cooking appliances again.

Should any of the tests fail to yield the described results, contact a factory-authorized service company and have the unit evaluated and repaired. A *Giles Manufacturer's Representative* can provide information about nearby authorized service providers, or call *GILES Services* at 800-554-4537 for assistance.

Hood Cleaning & Maintenance

5.02 Quarterly Hood Cleaning

CAUTION

DO NOT wash down Hood with a spray hose.

DO NOT steam clean or use pressure washing equipment.

DO NOT use products containing chlorine or 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 Degreaser/Cleaner**, a readily available, biodegradable, non-toxic degreasing spray cleaner.

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

- 1. Disconnect power from the unit at circuit breaker panel.
- 2. If possible, unplug and remove cooking appliances from underneath hood.
- 3. Remove all filters.
- 4. Use a soft cloth, or sponge, and a mild bio-degradable degreasing cleaner (Simple Green® Crystal Foaming Spray Degreaser/Cleaner is recommended) to clean surfaces inside the entire hood plenum, removing any grease film accumulation.
- 5. Inspect the hood blower fan on each side and, if possible, clean grease build-up from the blades using degreaser and 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 cleaning residue which may be discharged from the blowers.
- 5. Thoroughly clean the under-hood area and 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 filters* & *EAC collector cells* see *Sections 4.04.1* & *4.04.2.* If necessary, obtain and install new fresh *pre-filters* & *charcoal filters*. Ensure all filters are reinstalled properly in the hood.
- 8. As necessary, reposition cooking appliance and restore power supply to the hood.

5.03 Fire Suppression System Maintenance

The fire extinguishing system connected to the hood must be maintained in accordance with the <u>Standard for Wet Chemical Extinguishing Systems</u>, <u>NFPA 17A</u> and with the instructions of the system's installer.

All inspection, maintenance, troubleshooting, repairs and general servicing of the fire extinguishing system must be performed by an authorized **Ansul® Distributor/Dealer**. Required maintenance activities are described in the subsequent sections.

Consult the fire suppression system documentation provided by the system installer for complete maintenance guidelines.

Hood Cleaning & Maintenance

5.03.1 Semi-Annual Fire Suppression System Inspection & Maintenance

Inspection & service for the fire suppression system must be performed by a technician from a qualified *Ansul® Distributor/Dealer*. 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 risk 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 nozzle blow-off caps are in place and in good condition ... replace as needed. See **Section 2.06.4, Fire Extinguisher Nozzle Locations**.
- Inspect & test the remote manual activation station for function and wear.
- Install a test detector link ... cut to test automatic actuation.
- Inspect & clean all detector links. Confirm that detector links are of the correct temperature rating. See **Section 2.06.2, Fire Suppression Detector Links & Location**.
- Inspect link conduit and wire cable for wear at all pulleys & detectors ... replace cable if necessary.
- Record maintenance date & service performed in a permanent record ... sign-off & attach tag to system in a conspicuous location.

5.03.2 Annual Fire Suppression System Inspection & Maintenance

The annual inspection & maintenance is the same as semi-annual except:

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

5.03.3 12-Year Fire Suppression System Inspection & Maintenance

Same as annual inspection & maintenance except:

- Wet-chemical fire suppressant for be replaced.
- Hydrostatic test & certify suppressant tank and compressed gas charging cartridge. *As an alternative, the components can be replaced with new*.
- Flow test the regulator.

Model: FSH-6 Hood Cleaning & Maintenance

5.04 Inspection & Maintenance Log

CI	Check					Initial/Date Check				Initial/Date						
1	1	7	1	1				RT 1-2-15	1	2	3	4	5			
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5	6				1	2	3	4	5	6		
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5	6	7			1	2	3	4	5	6	7	
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5	6				1	2	3	4	5	6		
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5	6	7			1	2	3	4	5	6	7	
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5	6				1	2	3	4	5	6		
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1	2	3	4	5	6	7			1	2	3	4	5	6	7	
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1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5	6				1	2	3	4	5	6		
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1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5	6	7			1	2	3	4	5	6	7	
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5	6				1	2	3	4	5	6		
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5	6	7			1	2	3	4	5	6	7	
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5	6				1	2	3	4	5	6		
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5					1	2	3	4	5			
1	2	3	4	5	6	7			1	2	3	4	5	6	7	

1	Door Check	Section 5.01
2	Baffle Filter Check	Section 5.01
3	EAC Filter Check	Section 5.01
4	Pre-Filter/Charcoal Filter Check	Section 5.01
5	Filter Clogged	Section 5.01
6	Quarterly Cleaning	Section 5.02
7*	Semi-Annual Fire Suppression System	Section 5.03.1
8*	Annual Fire Suppression System	Section 5.03.2

^{*} Must be performed by an authorized Ansul® Service Agent

Troubleshooting

6. Troubleshooting

This section describes basic troubleshooting procedures for the ventless hood. Generally, troubleshooting and repairs should only be performed by trained & qualified service technicians. Troubleshooting by users should be limited to issues and activities that are only operational or procedural.

▲ DANGER

Troubleshooting for electrical problems should be performed **ONLY** by qualified service technicians or professional electricians. Serious injury, or even death, will result from contact with energized electrical circuits.

6.01 Procedures

Problem	Probable Cause	Corrective Action	
Hood will not turn ON	a. A filter access door is open	Close & latch both doors.	
	b. Improper start-up method	Press & momentarily hold top of POWER switch.	
	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 main electrical panel.	
[FILTER MISSING] light ON @ start-up	a. Baffle, pre-filter or charcoal filters not installed or not properly seated	Install filters and/or check filter positioning inside hood.	
EAC [WASH] light ON @ start-up &	a. Excessive build-up on fins	Clean the EAC cell, Section 4.04.2	
beeping alarm tone sounding	b. EAC cell is not installed	Install EAC cell	
	c. Poor connection at contact plate inside hood.	Check cell position, clean contacts.	
	d. Faulty EAC contact plate	Inspect plate replace if needed.	
	e. Missing ionizer wires	Replace wires, (9) required.	
EAC [CHECK] light ON • Hood running	a. EAC shorted to ground (damaged)	Replace or repair the EAC cell.	
No alarm sounding	b. High voltage wires shorted to ground.	Correct shorted condition.	
	c. Collector fins shorted out due to excessive moisture.	Eliminate condensation causes - cold air being drawn into hood, overly wet food, etc.	

Continued on Next Page

Troubleshooting

6.01 Procedures - continued

Problem	Probable Cause	Corrective Action	
Cooking appliances will not power-up: • Hood running	a. A baffle filter is missing or not properly installed	Install filter / check positioning.	
• [FILTER MISSING] light ON	b. A charcoal or pre-filter is missing or not properly installed	Install filter / check positioning.	
	c. Faulty filter switches.	Test & replace as needed.	
Cooking appliances will not power-up: • Hood running	a. Baffle, pre-filter or charcoal filter clogged	Replace charcoal or pre-filter • Clean baffle filter.	
 [CLOGGED FILTER] light ON Continuous (steady) tone alarm sounding. 	b. Hood exhaust outlet excessively block	Clear of any obstructions.	
	c. Vacuum switch is out of adjustment	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	
Cooking appliances will not power-up: • Hood running	a. Excessive grease film built up on collector fins; too dirty	Clean the EAC cell, Section 4.04.2.	
• [FILTER MISSING] light OFF • [WASH] light ON	b. EAC cell is not installed	Install clean EAC cell.	
Beeping tone alarm sounding.	c. EAC driver board is faulty	Test & replace EAC power supply if needed.	
	d. Poor connection at contact plate; dirty contacts, misalignment, faulty contacts.	Check cell position, clean contacts, inspect contact plate & replace if needed.	
	e. Ionizer wire(s) missing	Replace missing wire(s)	
Cooking appliances operating: • Hood running • EAC [CHECK] light ON	a. Ionizer wire broken & touching chassis.	Replace ionizer wire.	
No alarm sounding, but cell is <u>NOT</u> cleaning air.	b. Collector fins shorted to ground by moisture.	Dry cell, determine cause of moisture, cool air being drawn into hood creating condensation.	
Under-hood lighting does not come ON.	a. Bulb burned out	Replace bulb.	
	b. Faulty light switch	Check & replace switch.	

Parts List Model: FSH-6

7. Parts List

This section lists 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 company 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 agents, 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:

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 message to route your call appropriately. If necessary after hours, leave a voicemail message and a service representative should respond within 30 minutes.

Website: <u>www.qfse.com</u> Email: <u>services@qfse.com</u>

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.

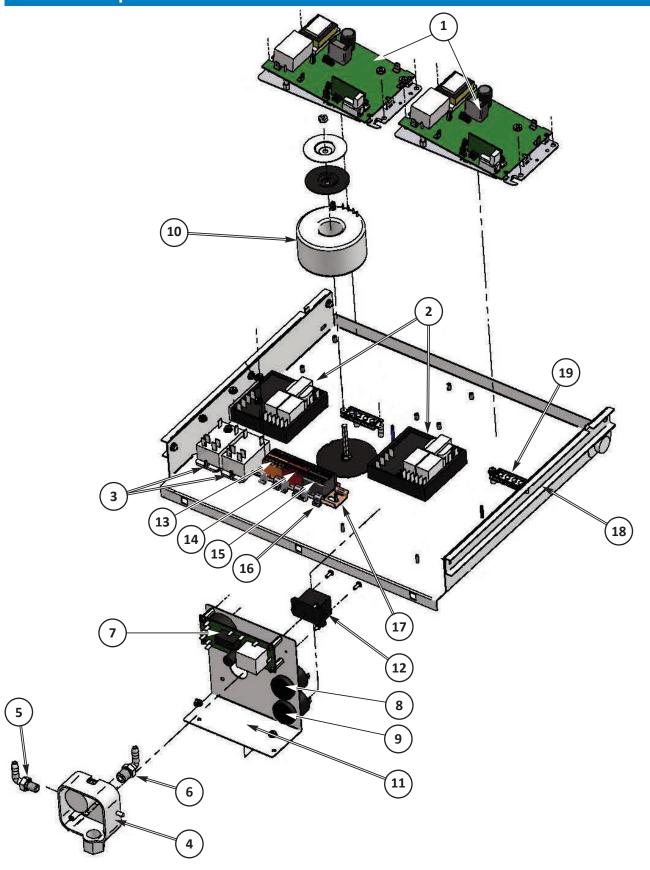
Model:	
Serial Number:	
Voltage:	
Phase:	



The information can be found on the serial/data label located inside Door.

Model: FSH-6 Parts List

7.02 Component Drawer



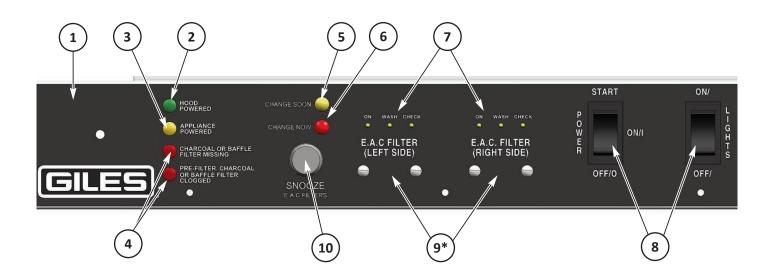
Parts List Model: FSH-6

7.02 Parts List for Component Drawer

Item	Part No.	Qty.	Description	
1	21296	2	EAC POWER SUPPLY, w/DRIVER BOARD, 120V	
2	23776	2	ALARM & SHUTDOWN MODULE, FILTER SYSTEM	
3	21417	2	RELAY, POWER SWITCH, 30A/2.5HP, 240V	
4	20390	1	VACUUM SWITCH, ADJUSTABLE	
5	40877	1	NYLON FITTING, 90-EL, 1/8 MALE NPT, BARB FOR 1/4 I.D.TUBING	
6	40880	1	NYLON FITTING, 90-EL, 1/4 MALE NPT, BARB FOR 1/4 I.D.TUBING	
7	20572	1	GMT, EAC TIMER, BOARD	
8	23782	1	SONALERT, 250V, CONTINUOUS TONE	
9	21659	1	SONALERT, 120V, INTERMITTENT BEEP TONE	
10	21337	1	TRANSFORMER, 230VAC-TO-115VAC (COMES w/MOUNTING HARDWARE)	
11	98592	1	BRACKET, VACUUM SWITCH	
12	21203	1	RELAY, SPST-NO-NC, 240VAC	
13	21512	1	DISTRIBUTION BLOCK, 12-PL, PTFIX, 12-26 AWG, ORANGE	
14	21509	1	DISTRIBUTION BLOCK, 12-PL, PTFIX, 12-26 AWG, RED	
15	21510	1	DISTRIBUTION BLOCK, 12-PL, PTFIX, 12-26 AWG, BLACK	
16	21496	6	END BRACKET CLIP, DIN RAIL, PTFIX, NS-35	
17	91717	1	DIN RAIL, 7"	
18	41049	1 PAIR	DRAWER SLIDES, 14"	
19 – 2		2	TERMINAL BLOCK (COMES W/ITEM #1, 21296)	

Model: FSH-6 Parts List

7.03 Control Panel



^{*} Inside Panel, Not Shown

Parts List Model: FSH-6

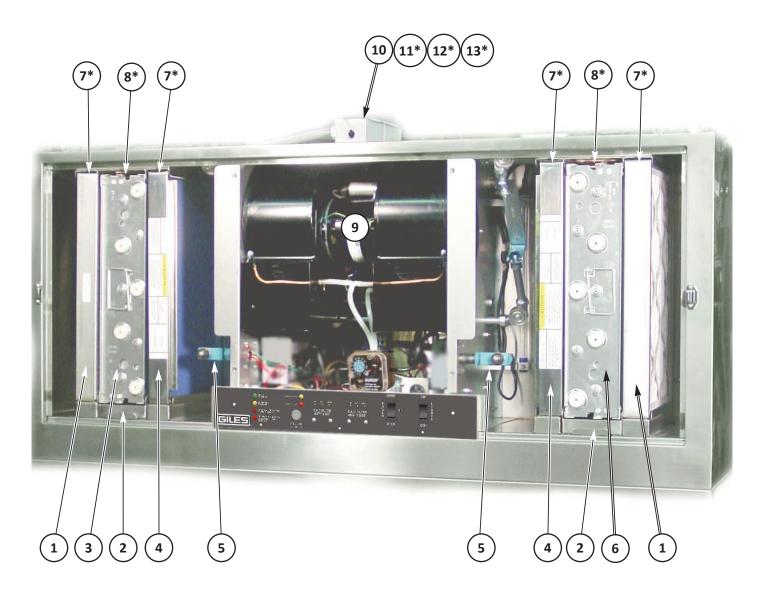
7.03 Parts List for Control Panel

Item	Part No.	Qty.	Description	
1	67143	1	LABEL, CONTROL PANEL, FSH-6 W/TIMER	
2	20398	1	INDICATOR LIGHT, GREEN, 250V, 0.5W	
3	20399	1	INDICATOR LIGHT, AMBER, 250V, 0.5W	
4	20420	2	INDICATOR LIGHT, RED, 250V, 0.5W	
5	20694	1	PILOT LIGHT, YELLOW, EAC TIMER	
6	20693	1	PILOT LIGHT, RED, EAC TIMER	
7	24209	2	LED, EAC STATUS INDICATOR	
8	21441	2	SWITCH, ROCKER, (ON)-0N-OFF, 250V, 20A	
9*	30833	2	BRACKET, LED CLUSTER	
10	20692	1	SWITCH, MOMENTARY PUSH-BUTTON, EACTMR	

^{*} Inside Panel, Not Shown

Model: FSH-6 Parts List

7.04 Hood Filter Chamber



^{*} Not Shown

Parts List Model: FSH-6

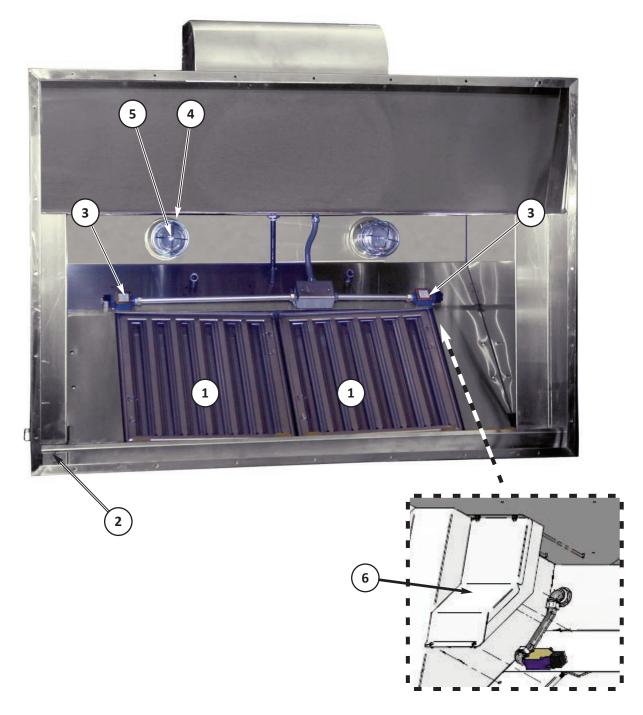
7.04 Parts List for Hood Filter Chamber

ITEM	PART NO.	QTY	DESCRIPTION
1	91707	2	PRE-FILTER ASSEMBLY, 12 X 20 X 2
2	98146	2	E.A.C. FILTER DRIP TRAY
3	20521	1	FILTER, EAC 12 X 20, LEFT SIDE ONLY
4	32056	2	CHARCOAL FILTER ASSEMBLY
5	21157	2	SWITCH, LIMIT, 15A, 250V, BROWN BODY
6	20520	1	FILTER, EAC 12 X 20, RIGHT SIDE ONLY
7*	23200	4	SWITCH, SNAP ACTION ROLLER
8*	21125	2	EAC CONTACT BOARD
9	34616	1	DUAL BLOWER ASSEMBLY
10	91522	1	BOX, POWER CONNECTION, FSH HOOD
11*	90550	1	DIN RAIL, TERMINAL BLOCK, 4"
12*	20319	5	TERMINAL BLOCK, 24-8 AWG, 600V, 50A
13*	20320	2	TERMINAL BLOCK, GROUND, 24-8 AWG

^{*} Not Shown

Model: FSH-6 Parts List

7.05 Under-Hood Components



^{*} Not shown

Parts List Model: FSH-6

7.05 Parts List for Under-Hood Components

ITEM	PART NO.	QTY	DESCRIPTION
1	42300	2	BAFFLE FILTER, S/S, 20 X 20
2	32776	1	DRIP CUP
3	32102	2	BAFFLE FILTER SWITCH ASSY.
4	40625	2	LIGHT FIXTURE
5	20395	2	FLUORESCENT BULB, COATED
6	98104	2	CONDUIT COVER

Model: FSH-6 Parts List

7.05 Doors & Front Panel



NOTE: Legs are welded in place ... cannot be replaced.

^{*} Not shown

Parts List Model: FSH-6

7.05 Parts List for Doors & Front Panel

ITEM	PART NO.	QTY	DESCRIPTION
1	42827	2	DOOR LATCH
2	98036	1	ACCESS DOOR ASSY, LEFT
3*	46126	1	FIRE DAMPER, 286°F LINK
4	98141	1	FAN COVER (COVER ONLY)
5*	98142	1	SCREEN, FIRE DAMPER
6	98037	1	ACCESS DOOR ASSY, RIGHT
7	91945	1	SKIRT, FSH-6, 8", UNIVERSAL
8	91583	2	72" HOOD STAND SIDE
9	91938	1	72" HOOD STAND, TOP BACK PANEL, FSH-6
10	91940	1	72" HOOD STAND, BOTTOM BACK PANEL, FSH-6
11*	92063	2	CHANNEL, APPLIANCE POSITIONING, FSH-6
12*	91708	2	CHANNEL, FRONT TRIM, HOOD STAND-72
13	90844	1	ACCESS COVER, VACUUM SWITCH

^{*} Not shown

