

Operations & Service Manual

Model GVH-C & -F



Model GVH-C

Model GVH-F



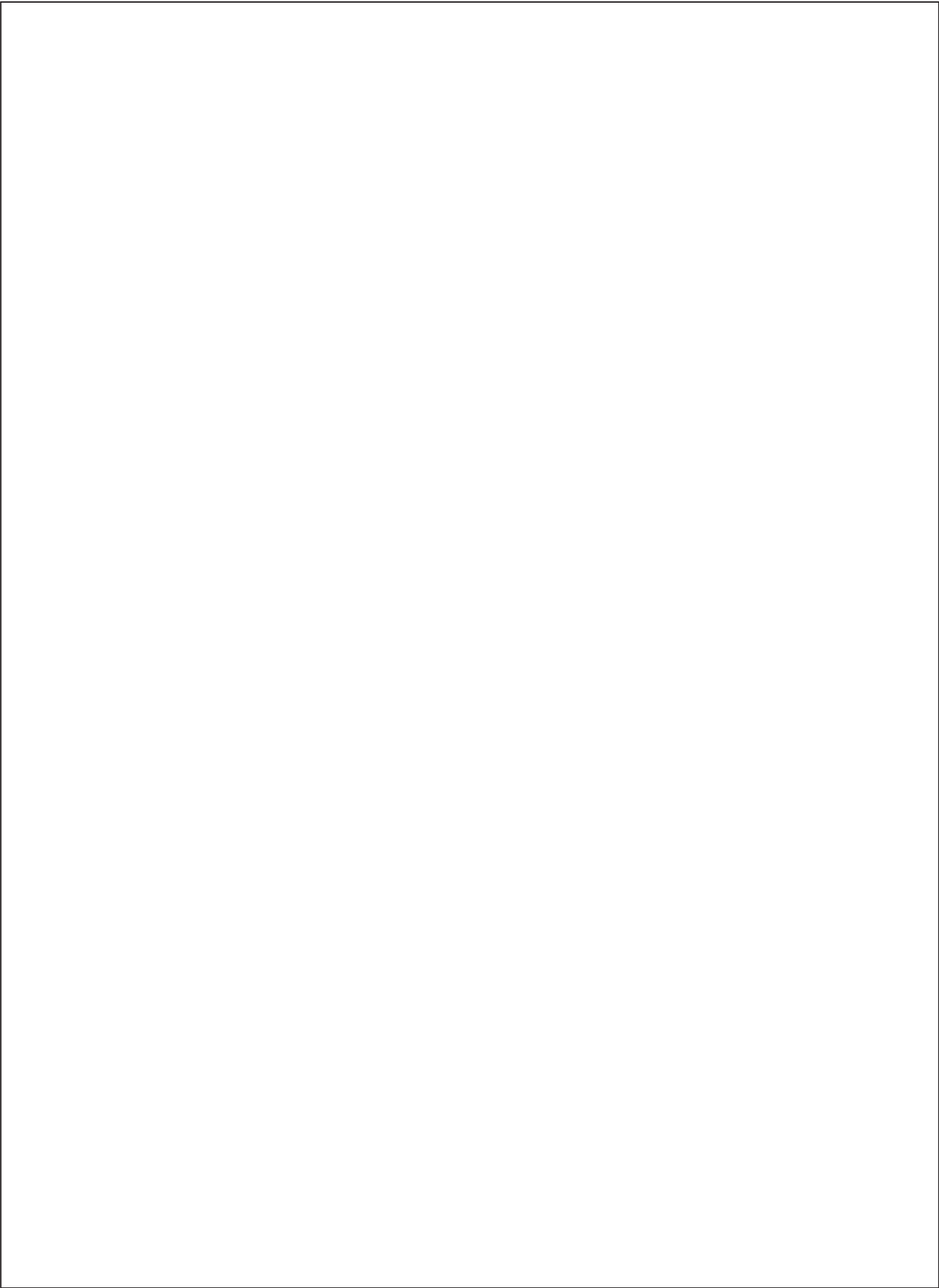
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LIMITED WARRANTY

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



Safety **v**

Safety Overview v

Specific Safety Precautions vi

1. Introduction **1**

1.01 Construction 1

1.02 Standard Features 1

1.03 Optional Features 1

1.04 Specifications 2

1.04.1 Overall Dimensions: GVH-C Counter-Top Model 2

1.04.2 Overall Dimensions: GVH-F Floor-Stand Model 3

1.04.3 Agency Certifications 4

1.04.4 Hood Weight 4

2. Installation **5**

2.01 Location 5

2.02 Unpacking 6

2.03 Clearance to Combustibles 7

2.03.1 GVH-C Counter-Top Hood 7

2.03.2 GVH-F Floor-Stand Hood 8

2.04 Cooking Appliance Limitations & Clearances 9

2.04.1 Limitations and Clearances, GVH-C 9

2.04.2 Limitations and Clearances, GVH-F 10

2.05 Electrical Requirements 11

2.05.1 Electrical Connections 12

2.05.2 Hood & Appliance Wiring Configurations 13

2.05.2.1 Interlocked Receptacle Option 13

2.05.2.2 Hood & Appliance on same Circuit 14

2.05.2.3 380-480V Appliance Power Separate from 208-240V Hood Power 15

2.05.2.4 120V to 480V Appliance Power Separate from 208-240V Hood Power
using Remote Shunt Trip Device 16

2.06 Fire Suppression System Installation 17

2.06.1 Fire Suppression System Detector Link Specification & Location 18

2.06.2 Fire Extinguisher Nozzle Locations 19

2.06.3 Fire Extinguisher Nozzle Alignment 20

2.07 Final Installation 21

3. Overview **23**

3.01 Control Panel 24

3.02 Hood Front & Filter Chamber 26

3.03 Items Shipped w/Hood 28

4.	Operation & Filter Maintenance.	30
4.01	Hood Operation	30
4.01.1	Starting the Hood	30
4.02.	Hood Filter System, Maintenance & Alarms	30
4.02.1	Ventless Hood Filter Table.	30
4.02.2	Filter Removal, Baffle, EAC, Charcoal	31
4.02.3	Filter Installation, Baffle, EAC, Charcoal.	32
4.02.4	Hood Filter Alarms	32
4.02.4.1	Charcoal or Baffle Filter Missing.	32
4.02.4.2	Charcoal or Baffle Filter Clogged	33
4.02.4.3	E.A.C. Filter Status & Alarm	33
4.03	Filter Maintenance	34
4.03.1	Baffle Filter Cleaning	34
4.03.2	E.A.C. Filter Cell Cleaning.	34
4.03.2.1	E.A.C. Cell Cleaning: Primary Spray Method	35
4.03.2.2	E.A.C. Cell Cleaning: Alternative Soak Method	36
4.03.3	Charcoal Filter Maintenance	37
4.04	E.A.C. Filter Cell Cleaning Timer	38
5.	Hood Cleaning and Maintenance.	40
5.01	Monthly Hood Interlock Inspection	40
5.02	Quarterly Hood Cleaning	41
5.03	Fire Suppression System Maintenance	41
5.03.1	Semi-Annual (6-Mon) Fire Suppression System Inspections & Maintenance.	42
5.03.2	Annual (12-Mon) Fire Suppression System Inspections & Maintenance	42
5.03.3	12-Year Fire Suppression System Inspections & Maintenance	42
6.	Troubleshooting.	44
6.01	Troubleshooting Procedures	44
7.	Parts List	47
7.01	Parts Ordering and Service Information.	47
7.02	Rear Electrical Components	48
7.03	Hood Front / Filter Compartment	50
7.04	Hood Front / Control Panel	52
7.05	Under-Hood Components	54

Safety Overview:

The information contained in this manual has been prepared to explain proper procedures for safely installing, operating and maintaining this **Giles Models GVH-C & GVH-F Ventless Recirculating Hood**.

Throughout the manual, safety precautions are identified by certain alert notifications. Important safety information will precede the processes to which it applies. Suggested, recommended, and other noteworthy information is marked as **NOTE**, or will be labeled 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 that a future event or condition will occur.

 **Hazard Alert Symbols** are used in conjunction with notifications, such as **DANGER**, **WARNING**, or **CAUTION**, to alert users to potential personal injury hazards and/or poor operating practices. These notifications will immediately precede precautionary measures relating to avoiding the hazard or practice. Adhere to all of the stated safety precautions to avoid possible injury, even death, damage to the equipment or damaged property. 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.

CAUTION

- Indicates a potentially hazardous situation (*or unsafe practice*) which, if not avoided, may result in minor to moderate injury.

CAUTION

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

NOTE or IMPORTANT!

- Identifies suggested, recommended, or other important information.

Specific Safety Precautions:

Please observe all of 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 or property.

DANGER

- Before cleaning or performing maintenance, place power switch in the **[OFF]** position. Remove all power from the equipment by unplugging power cords or turning **OFF** circuit breakers in the electrical panel supplying the equipment.
- When replacing filters, place **POWER** switch in the **[OFF]** position to avoid possibility of accidentally contacting energized electrical components and/or causing equipment damage.
- **DO NOT** wash down equipment with water from a spray hose ... **it is NOT considered wash-down safe.**
- 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 **NOT** suitable for every commercial food service application. Failure to fully comply with all site requirements and installation limitations as outlined in the **GFSE Hood Approval Letter and this Manual**, will result in poor and highly unsatisfactory hood performance.
- **DO NOT** use ventless/recirculating hoods with gas-fired cooking appliances due to a high potential for inhalation hazard due to excessive carbon monoxide build-up in the kitchen area. Hood is listed and approved **ONLY** for use with electrically heated appliances.
- The unit must be adequately and properly grounded. Improper grounding may result in electrical shock to the user. Always refer to local electrical code to ensure proper grounding of this and all other electrical equipment.
- Always consult with an professional electrician, or other qualified kitchen equipment technician, to ensure that proper electrical supply is available (*see serial label on unit*) and that circuit breakers and wiring are of sufficient rating and gauge to power the equipment. A wiring diagram has been provided with the unit to aid technicians. **The unit must be installed and electrically grounded in accordance with all prevailing local code, or in the absence of local code, in compliance with the National Electrical Code, NFPA 70.**
- Improper installation, modification of the unit, or improper service & maintenance could result in serious injury, even death; damage to the equipment or damage to property, 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:

CAUTION

- Exercise care when removing wooden crating framework and the unit from shipping pallet. The hood is very heavy ... extreme care and precaution must be exercised when handling and moving the hood into position. Be aware that unit is *top-heavy*. Depending on hood model, once located, unit must be properly anchored to a stable counter-top or the floor.
- **DO NOT** operate the appliance, unless the functionality of all components and all operating procedures are fully understood (see **Section 3**). Once you have reviewed and fully understand the *Overview Section*, closely follow the instructions presented in this *Operations 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 injuries due to **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 on the front hood control panel are impact-sensitive. Exercise appropriate care when operating the equipment, setting controls and cleaning.
- Handle the baffle filter and the electronic air cleaner (E.A.C.) collector cell carefully. They contain exposed, very thin, sheet metal edges ... improper handling could result in cuts on fingers and hands. **Heavy-duty rubber gloves are recommended.**
- After cleaning, **DO NOT** attempt to dry the E.A.C. collector cell by installing it and running the hood. **NEVER PLACE A WET CELL INTO THE HOOD, doing so can potentially damage the E.A.C. system and cause improper operation. Such damage is NOT cover by the factory warranty.**
- When cleaning:
 - **DO NOT** steam clean hood.
 - **DO NOT** use cleaning 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** add attachments, or otherwise modify the equipment! **DO NOT** attach any type of ductwork to the hood exhaust outlet 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.

NOTE:

- Comply with all appropriate state and/or local health regulations regarding cleaning and sanitation of all foodservice equipment.
- To clean surface areas of any built-up of grease residue, *GILES* recommends using ***Simple Green® Crystal Foaming Spray Cleaner/Degreaser*** (NSF approved, biodegradable, non-toxic).
- *GILES* assumes no responsibility in regard to code compliance for installation and use of Ventless Recirculating Ventilation equipment. The customer is responsible for obtaining all of the necessary approvals from ***Authorities Having Jurisdiction (AHJ)*** relating to installation and use of this equipment.

1. Introduction

Thank you for purchasing a **GVH Series Ventless Recirculating Hood System** manufactured by *Giles Enterprises, Inc.*, Montgomery, Alabama, USA, hereafter referred to as “*Giles*”. Giles Ventless Hood technology is the result of extensive engineering, research and development. Every unit is thoroughly inspected and tested prior to shipment to ensure it operates flawlessly after installation. With proper care and maintenance these units should provide years of trouble-free service.

The **GVH-C** model is designed specifically for use in counter-top applications and is listed for removal of grease-laden cooking vapors produced by a variety of small electrically heated cooking appliances. The **GVH-F** model offers a self-supporting floor-stand alternative.

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. Adherence to recommendations will minimize potential for costly “downtime” and future repair expense. **Please retain this Manual for future reference.**

NOTE: Due to continuing improvements and product enhancements, some illustrations shown in this Manual might not exactly depict your actual equipment.

1.01 Construction

Constructed of 18 & 20-ga. high-grade stainless steel sheet metal

1.02 Standard Features

Control Panel: Indicator lights show the status of hood systems: Electronic Air Cleaner (EAC), appliance power, and filter warnings/alarms.

3-Stage Filter System:

- High-efficiency double Baffle Filter: Effectively removes large grease particulate from the air stream.
- Electronic Air Cleaner (E.A.C.): Electrostatically captures & collects fine grease particulate.
- Charcoal Filter: Helps control cooking aromas in the recirculated exhaust air.

Discharge Air Diverter: Allows use of hood in spaces with lower ceiling clearance.

Push-To-Start Feature: **PUSH-TO-START** power switch prevents unattended restarting of the hood and served appliances after power interruptions. Switch must be pressed again to restart hood & provide power to appliances. Complies with special code requirements for certain jurisdictions.

Pre-Plumbed for Fire Suppression System: Factory pre-plumbed, ready for connection to the listed fire suppression system ... **Ansul® R-102 wet chemical**. Includes piping, plenum & appliance nozzles, detector link brackets and fusible link cable conduit, w/cable. **The system, field installation, set-up, testing and commissioning shall be provided by the purchaser, and be supplied by an authorized Ansul distributor/dealer.**

E.A.C. Cleaning Timer - Prompts user that the Electronic Air Cleaner (EAC) collection cell needs to be cleaned. Timely cleaning (**DAILY preferred**) is essential to maintain peak performance of the air cleaning system. Timer system can disable the hood & appliance(s) should cleaning not be performed in a timely manner.

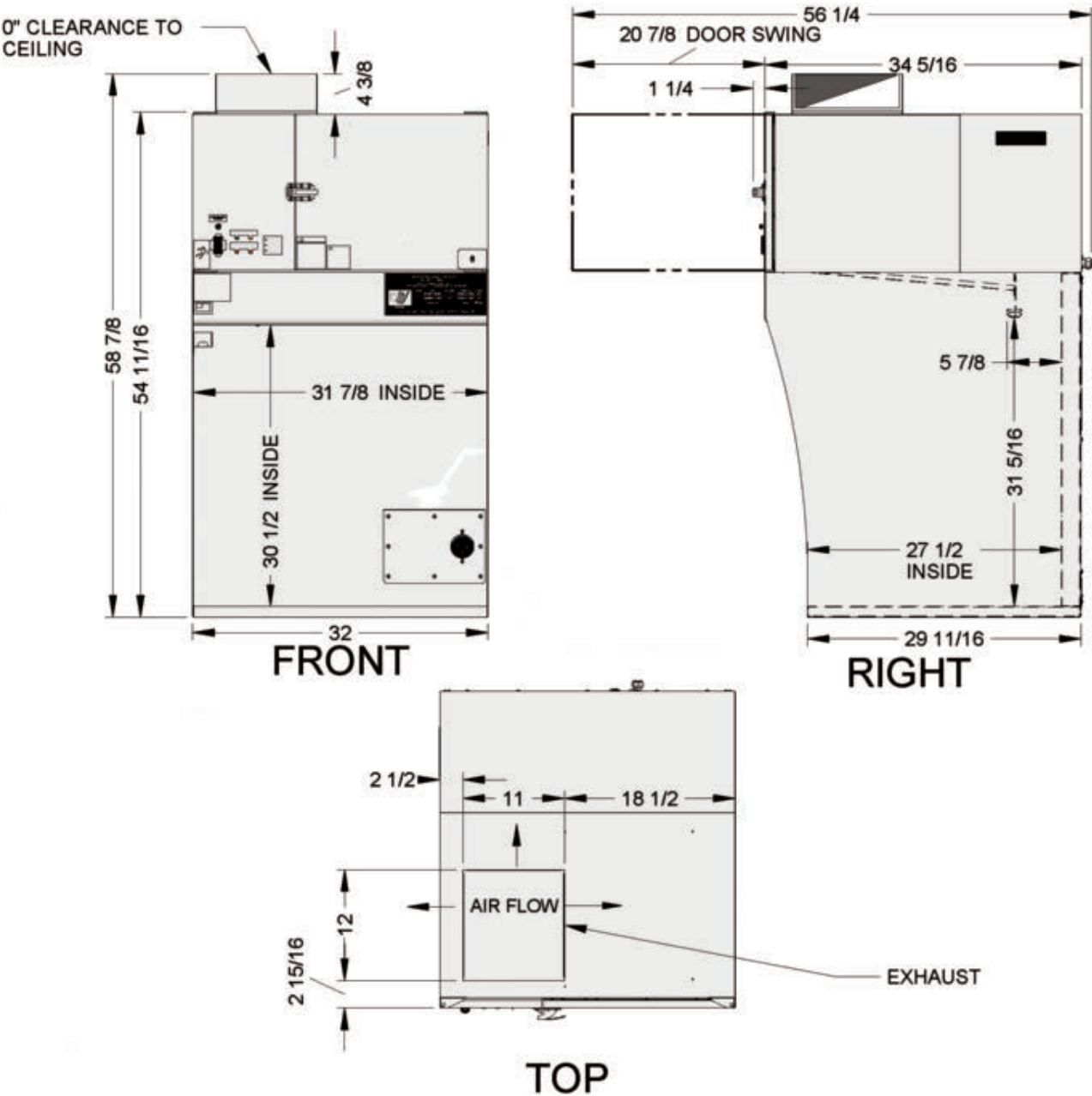
1.03 Optional Features

Floor Stand Version: Self-supporting, 58-3/4”, floor-stand instead of the standard counter-top stand and skirt. Overall height of hood and stand is 86-3/8”.

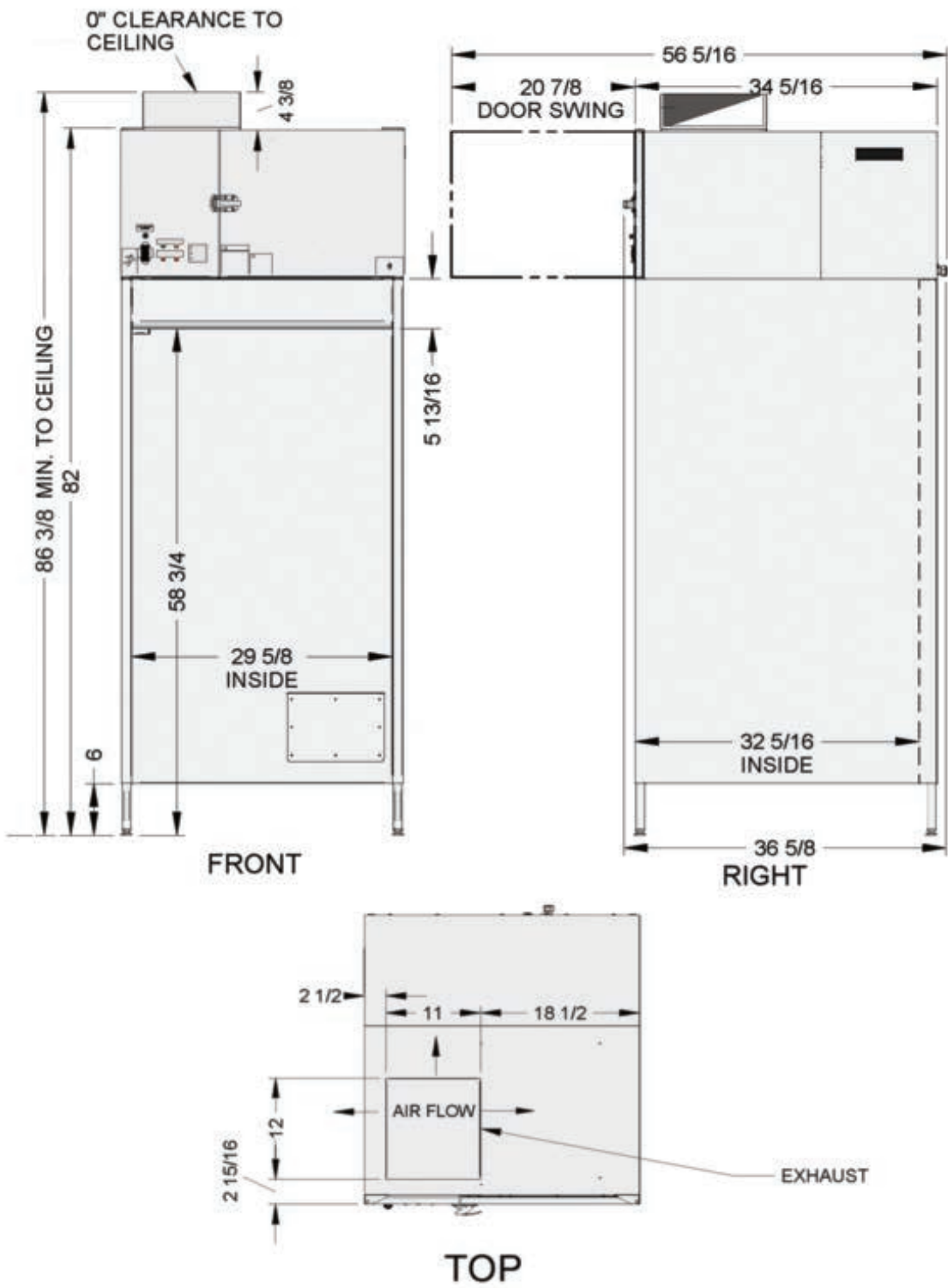
Appliance Power Receptacle: Factory-installed, 50A, NEMA receptacle for the appliance power cord provides added convenience.

1.04 Specifications

1.04.1 Overall Dimensions: GVH-C Counter-Top Model



1.04.2 Overall Dimensions: GVH-F Floor-Stand Model



1.04.3 Agency Certifications



1.04.4 Hood Weight

Hood Model	Crated Weight	Uncrated Weight (approx.)
GVH-C (Counter-Top)	435 lbs [197 kg]	320 lbs [145 kg]
GVH-F (Floor Stand)	485 lbs [220 kg]	365 lbs [166 kg]

2. Installation

This section summarizes procedures necessary for safe and proper equipment installation. To help avoid personal injury or equipment damage, be sure to adhere to 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 professional commercial kitchen equipment specialists, licensed electricians, and/or qualified HVAC contractors to assist with the details of installation. Call *Giles Technical Support* @ 800.554.4537, if assistance is required.

The hood is factory assembled with piping, conduit, nozzles, detector link brackets, and exhaust fire damper. Upon installation, hood must be connected to the **customer provided** fire suppression system specified by the UL listing ... the **Ansul® R-102 Wet Chemical system**. The system, field installation & set-up, testing and final commissioning shall 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. Cooking appliances to be used are within the hood's listing limitations stated in Section 2.04, and
- C. Installation site complies with all specific requirements and limitations outlined in the **GFSE Recirculating/Ventless Hood Approval Letter (HAL)** ... this document is available for review & download at **www.gfse.com** on the **HOME** page, under **SUPPORT** on the **VENTLESS SUPPORT DOCUMENTS** page.

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

- **MAXIMUM** of 1 hood per 300 sq ft of commercial kitchen space.
- Fresh outside air make-up must be equal to a **MINIMUM** of 15 complete room air exchanges per hour.
- Giles makes no representation as to a proper design or layout of any food service establishment in which ventless hoods will be used. Further, Giles does not perform site inspections prior to installation of its equipment.
- **NOTE:** Hood produces a sound level of approximately **65 dB** when in operation.

CAUTION

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

1. No minimum clearance (0") is required between the top of the exhaust air diverter and ceiling, but it is advisable to provide clearance (3" to 6") to allow for easy maneuvering should there be need to move the unit in the future. The area around the diverter openings must not be obstructed.
2. The model **GVH-C** hood is designed to mount onto a counter-top space. Ensure that the counter site is structurally sound and capable of supporting the hood's weight plus that of appliances to be placed under it. See **Section 1.04.4, Hood Weight**.

2.01 Location - continued

3. **DO NOT** attach additional ductwork to the exhaust outlet in an attempt to redirect airflow. Resulting back-pressure can significantly reduce hood capture and result in unsatisfactory performance.
4. When installing a model **GVH-F** floor stand version, be sure floor is relatively level. The hood stand has adjustable leveling legs and after final positioning, legs should be adjusted to the level unit (side to side, front to back and corner to corner).

The front legs have floor plates and the stand must be anchored to the floor using appropriate methods.

2.02 Unpacking

!! IMPORTANT NOTE:

If the palletized unit showed any signs of damage, you should have immediately inspected the equipment and all other packed accessories, and promptly notified the freight company of all damages. **Typically, it is the purchaser's responsibility to make freight damage claims.**

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

1. Position pallet in an area that provides adequate space for unpacking.
2. Remove the plastic stretch wrap, strapping and other packaging materials as necessary.
3. Carefully remove any wooden supports and/or crate framework that might be attached.
4. Locate and secure the envelope containing Warranty Card, other documentation or hardware provided for installation.
5. **Model GVH-F:** The unit is shipped without legs installed to avoid damage. The adjustable legs are packaged in a separate carton and secured on shipping pallet ... be sure to secure and retain, see **Adjustable Leg Installation** below.

CAUTION

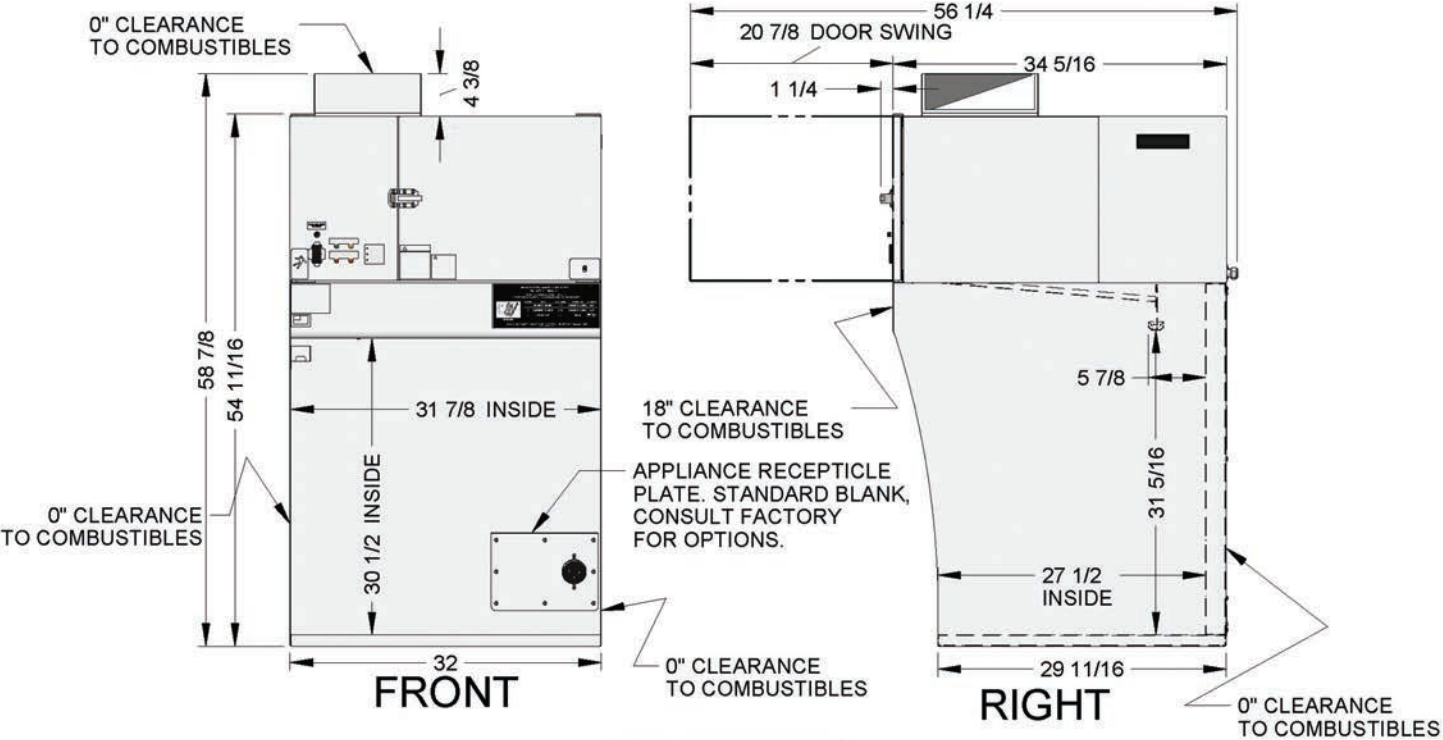
- *The unit is very heavy and top-heavy!* Exercise due caution when handling to avoid personal injury or damage to the equipment or property. Take necessary precautions to avoid damaging *hood base & skirt, or hood floor stand*.
- Exercise care when removing the wooden crating to avoid any exposed nails 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.

Installing Adjustable Floor Stand Legs: GVH-F

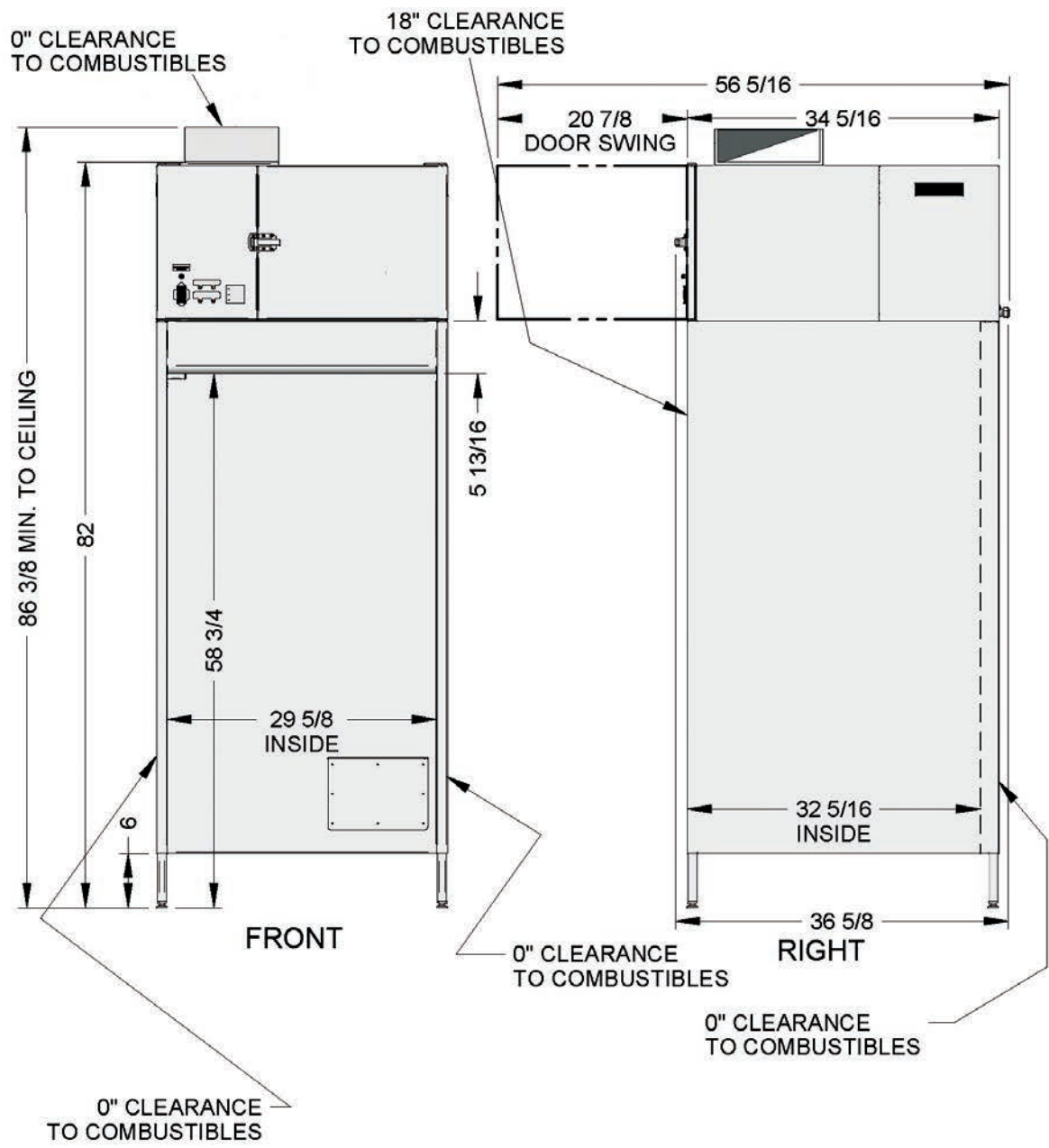
1. Obtain carton with adjustable legs ... **two (2) floor-plate style & two (2) standard**.
2. With appliance resting on a stable surface, have helpers tilt the unit forward and hold.
3. Install the two (2) *standard* legs at corners of stand side ... screw in clockwise until hand tight. **Take care not to cross-thread** ... the leg should turn fairly easy until tight.
4. Have helpers tilt unit back onto the installed rear legs, giving access to front of stand. Repeat the process for front two (2) *floor-plate* legs.

2.03 Clearance to Combustibles

2.03.1 GVH-C Counter-Top Hood



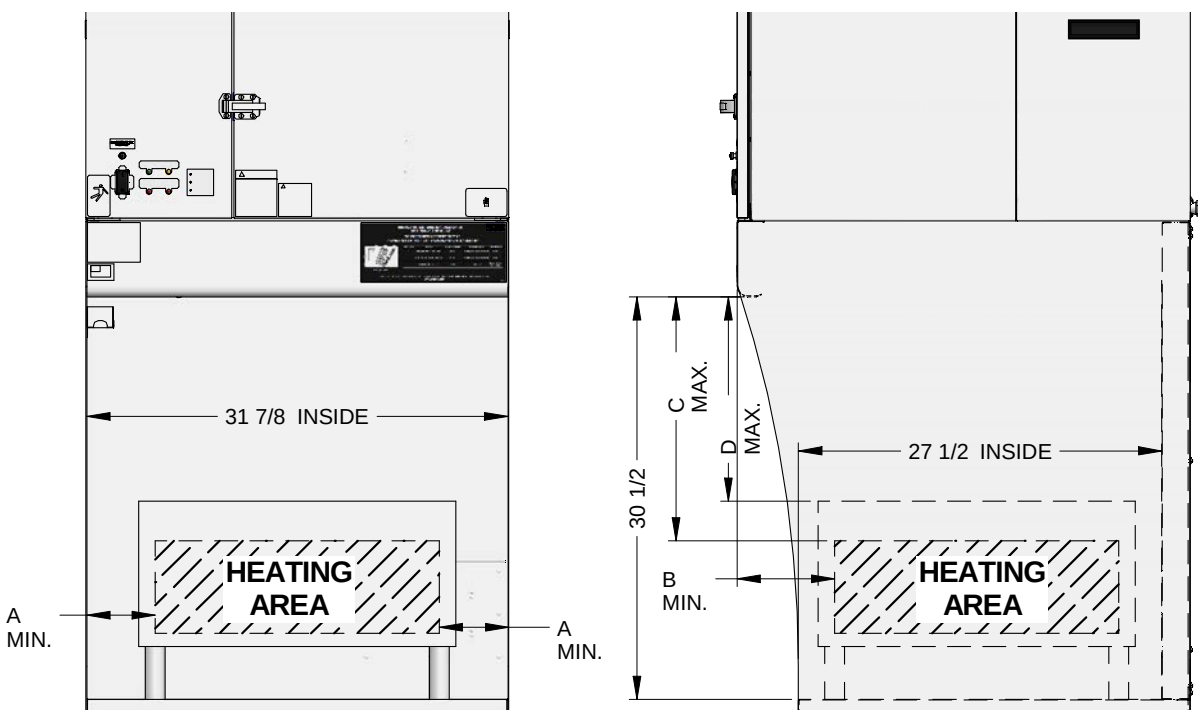
2.03.2 GVH-F Floor-Stand Hood



2.04 Cooking Appliance Limitations & Clearances

2.04.1 GVH-C Counter-Top Hood

HOOD APPROVED FOR ELECTRICALLY HEATED APPLIANCES ONLY.

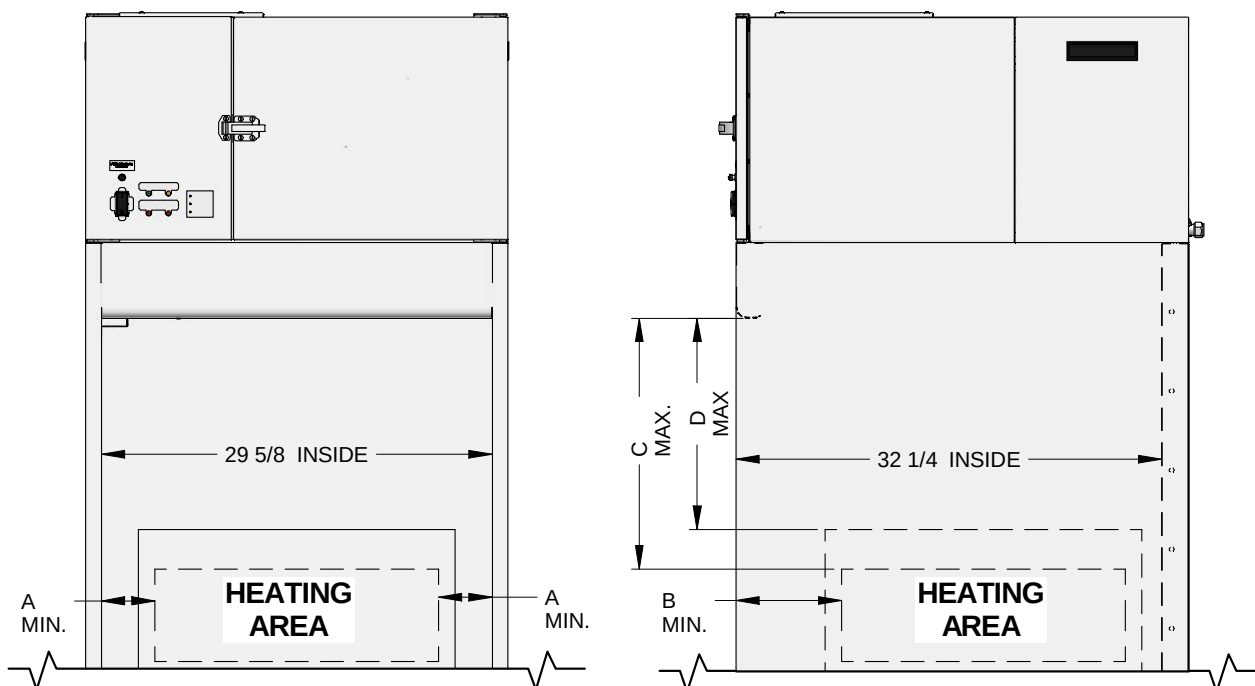


APPLIANCE RESTRICTIONS									
APPLIANCE	A	B	C	D	MAX. AMP.	MAX. SURFACE AREA	MAX. SHORTENING CAPACITY	MAX. TEMP	MAX ELEMENTS
FRYER(S)	1-1/2	8	N/A	19	100 TOTAL* (MAX 50AMP THROUGH HOOD INTERLOCK CONTACTOR)	576 SQ. IN.	30 LBS / 4.1GAL	350F COOKING TEMP	N/A
GRIDDLE	3-7/8	8-3/4	19	N/A	35	480 SQ. IN.	N/A	450F	N/A
RANGE	4	8-3/4	19	N/A	44 TOTAL ALL BURNERS	N/A	N/A	N/A	4
OVEN	1	8-3/4	19	N/A	55 TOTAL* (MAX 50AMP THROUGH HOOD INTERLOCK CONTACTOR)	N/A	N/A	500F	N/A
CONVEYOR OVEN	5-1/2	8	19	N/A	55 TOTAL* (MAX 50AMP THROUGH HOOD INTERLOCK CONTACTOR)	N/A	N/A	500F	N/A
TOASTER	1	8-3/4	19	N/A	55 TOTAL* (MAX 50AMP THROUGH HOOD INTERLOCK CONTACTOR)	N/A	N/A	500F	N/A

* Appliance(s) exceeding 50A must be powered through a circuit separate from the hood and be interlocked through the hood's contactor coil.

2.04.2 GVH-F Floor-Stand Hood

HOOD APPROVED FOR ELECTRICALLY HEATED APPLIANCES ONLY.



APPLIANCE RESTRICTIONS									
APPLIANCE	A	B	C	D	MAX. AMP.	MAX. SURFACE AREA	MAX. SHORTENING CAPACITY	MAX. TEMP	MAX ELEMENTS
FRYER(S)	5/16	8	N/A	19	100 TOTAL* (MAX 50AMP THROUGH HOOD INTERLOCK CONTACTOR)	576 SQ. IN.	50 LBS / 6.8 GAL	350F COOKING TEMP	N/A
GRIDDLE	2-11/16	8-3/4	19	N/A	35	480 SQ. IN.	N/A	450F	N/A
RANGE	2-7/8	8-3/4	19	N/A	44 TOTAL ALL BURNERS	N/A	N/A	N/A	4
OVEN	1	8-3/4	19	N/A	55 TOTAL* (MAX 50AMP THROUGH HOOD INTERLOCK CONTACTOR)	N/A	N/A	500F	N/A
CONVEYOR OVEN	5-1/2	8	19	N/A	55 TOTAL* (MAX 50AMP THROUGH HOOD INTERLOCK CONTACTOR)	N/A	N/A	500F	N/A
TOASTER	1	8-3/4	19	N/A	55 TOTAL* (MAX 50AMP THROUGH HOOD INTERLOCK CONTACTOR)	N/A	N/A	500F	N/A

* Appliance(s) exceeding 50A must be powered through a circuit separate from the hood and be interlocked through the hood's contactor coil.

2.05 Electrical Specifications

⚠ WARNING

- Food service equipment must be properly grounded in **accordance with local code, or in the absence of local code, with the National Electrical Code, ANSI/NFPA 70**. Improper grounding may result in electrical shock to users.
- Always consult a certified professional electrician, or other qualified service technician, prior to installation to ensure that electrical circuits to be used are of sufficient rating to power the hood and associated 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.**

Hood & Appliance** on same 208-240V Circuit

Voltage	Hz	Phase	Field Provided Appliance Load (Amps)	Hood Load (Amps)	Branch Circuit Breaker Hood & Appliance on Same Circuit
208-240	60	1 or 3	0 - 10.5	5	20
			10.6 - 14.5	5	25
			14.6 - 22.5	5	35
			22.6 - 38.5	5	55
			38.6 - 46.5	5	65
			46.7 - 50*	5	75

* Appliance(s) exceeding 50 Amps must be powered through a circuit separate from the hood and be interlocked through the hood's contactor coil.

** Appliance provided and rated separately from Hood.

Hood Only - Appliance on Separate Circuit Interlocked Through Separate Contactor

Voltage	Hz	Phase	Hood Load (Amps)	Breaker
208-240	60	1	5	10

2.05.1 Electrical Connections

IMPORTANT!

Electrical installation material (breakers, conduit, connectors, wire, etc.) and labor shall be supplied by the purchaser. Work should be performed by a qualified professional electrical contractor.

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

1. Confirm that the appropriate circuit breakers are installed in the electrical panel supplying power. Refer to **Section 2.05**.
2. Connect appropriately sized wire and flex conduit at the main electrical panel. As applicable, allow adequate length so the unit may be moved for cleaning and servicing.
3. Remove the rear hood and lower rear skirt panel. Route the power conduit/wires to the unit in accordance with applicable building and electrical codes.
4. If cooking appliances will be 208/240V and less than 50A total load, connect appropriate incoming power wires to the proper terminal blocks inside hood. Use appropriate strain relief connectors or conduit fittings (**not provided**) for routing wiring through knock-out holes. Conduit and all conduit connectors must be liquid-tight. See **Section 2.05.2, Hood & Appliance Wiring**.

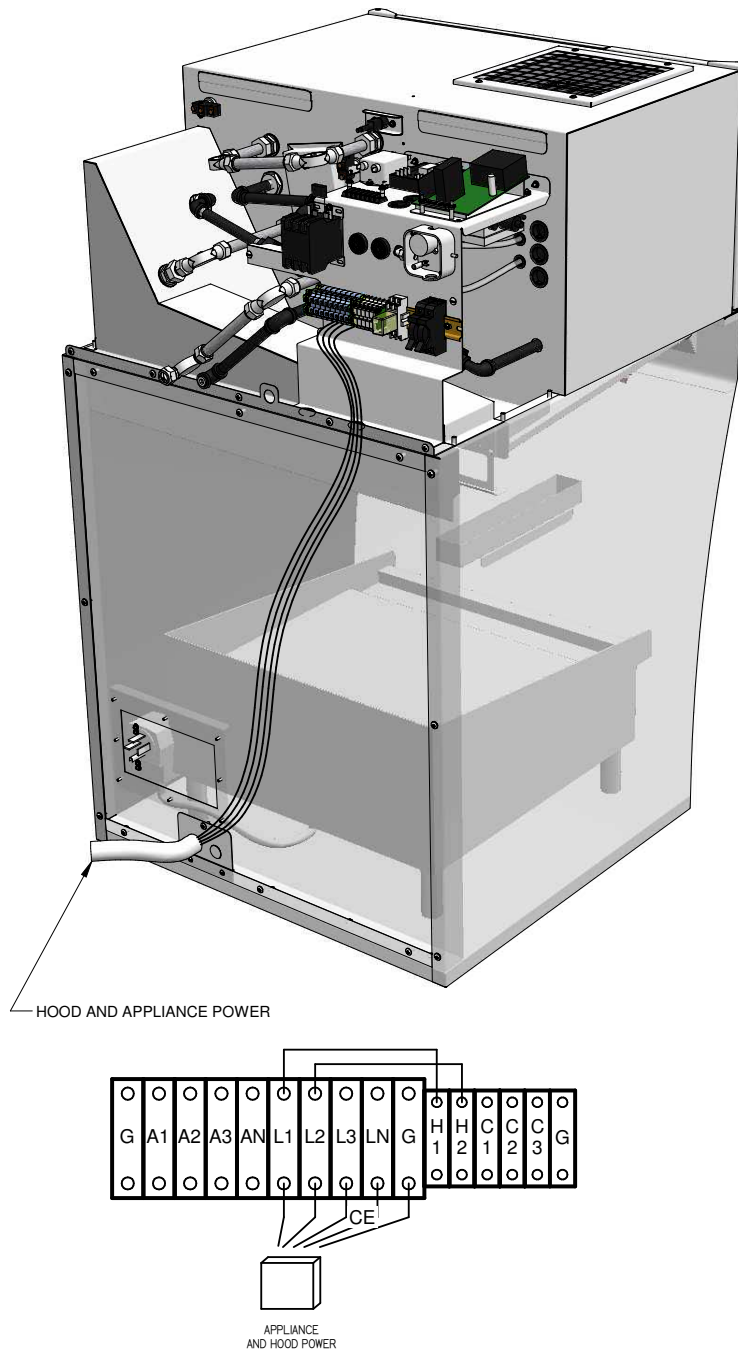
If cooking appliance(s) will be 480V, see **Section, 2.05.2.2**.
6. Reinstall rear cover & panels.
7. Turn **ON** breaker supplying power to hood.
8. Press and momentarily hold the top **[START]** portion of the **POWER** switch. Hood fan should start running. Release switch, fan should continue to run & switch springs back to the **[ON]** position. Return switch to **[OFF]** and continue installation process.

- If a remote contactor is used (**Section 2.05.2.4**), it must be a **UL Listed, Definite Purpose, AC Resistive, Air Heating** type contactor, suitable for the appliance load. Installation and connections shall be in accordance with the **National Electric Code NFPA 70**.

2.05.2 Hood & Appliance Wiring Configurations

2.05.2.1 Interlocked Receptacle Option

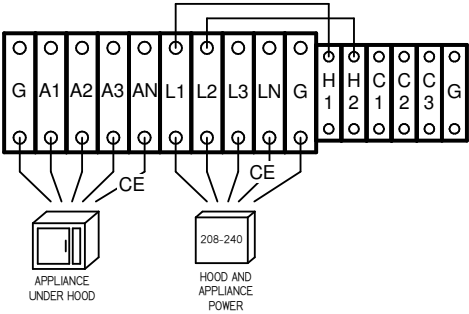
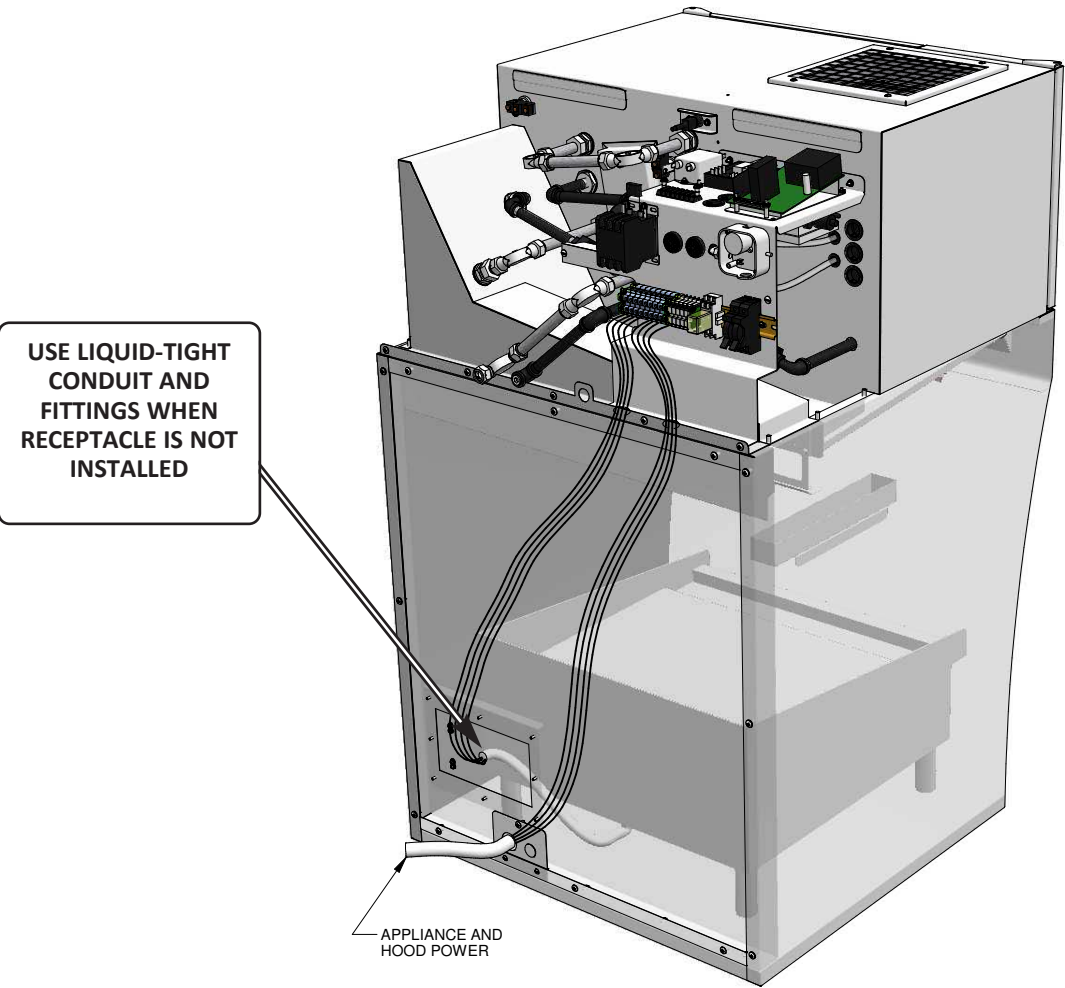
APPLIANCE POWER FROM RECEPTACLE LOCATED IN HOOD. APPLIANCE AND HOOD POWER ON SAME CIRCUIT BREAKER (USING HOOD APPLIANCE INTERLOCK CONTACTOR INCLUDED IN HOOD)



When the hood is equipped with an interlocked power receptacle, appliance power cord plugs directly into receptacle. It may be necessary to change appliance plug to match receptacle configuration. **Max. appliance load is 50A.**

2.05.2.2 Hood & Appliance on Same Circuit

208-240V APPLIANCE AND 208-240V HOOD POWER ON SAME CIRCUIT BREAKER

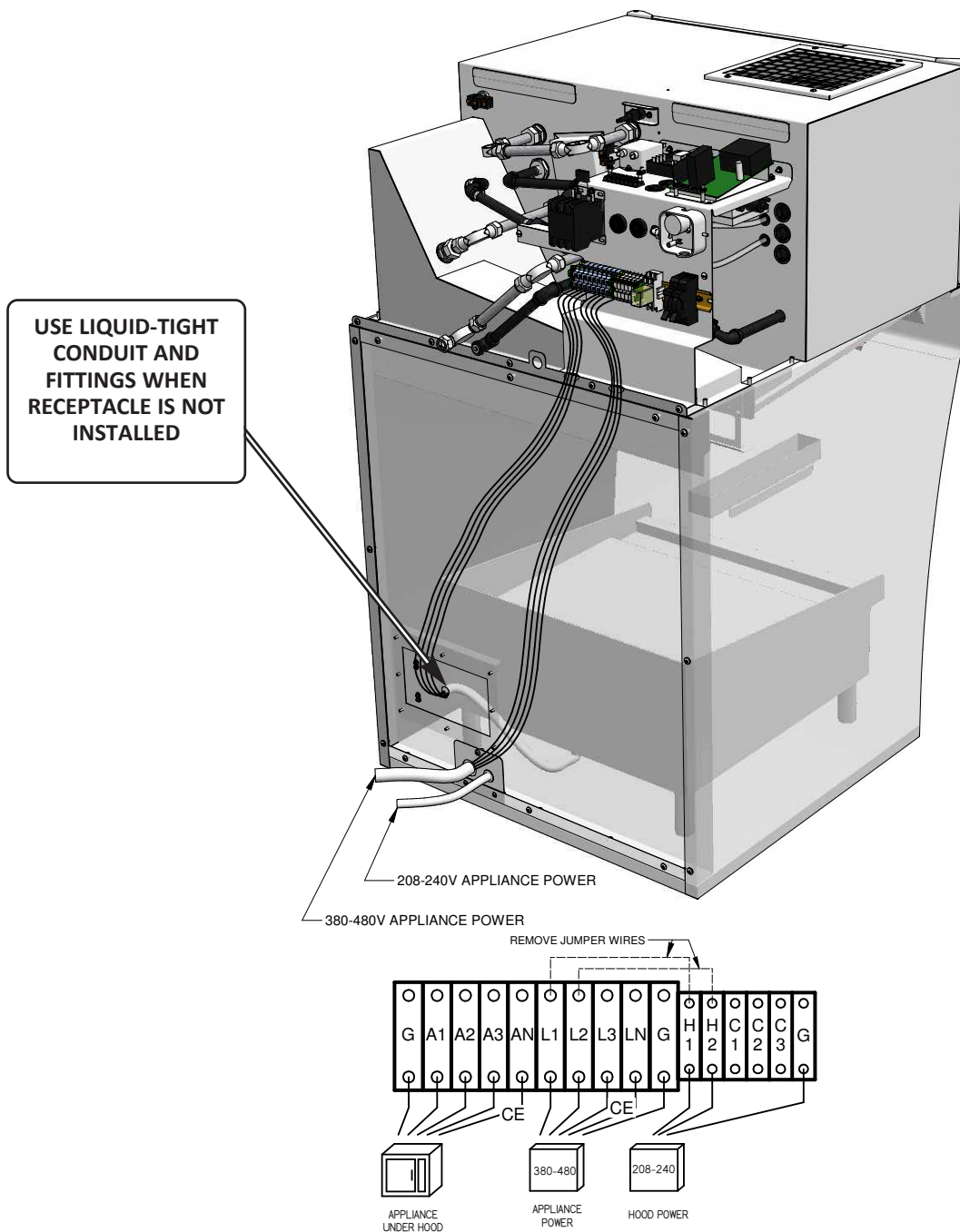


Model: GVH-C & -F

Model: GVH-C & -F

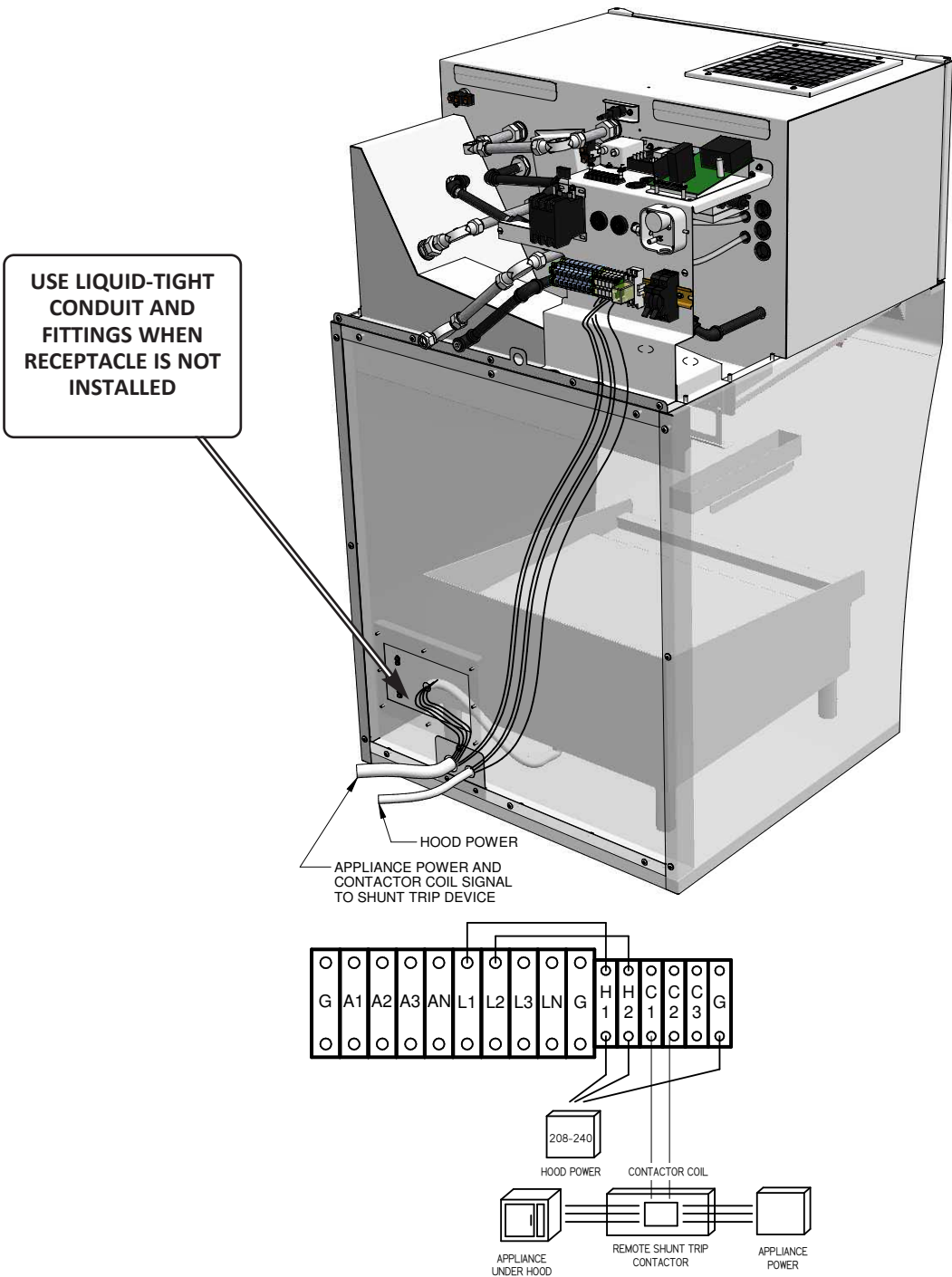
2.05.2.3 380-480V Appliance Power Separate Circuit from 208-240V Hood Power

380-480V APPLIANCE POWER SEPARATE FROM 208-240V
HOOD POWER (USING APPLIANCE INTERLOCK CONTACTOR
INCLUDED IN HOOD)



2.05.2.4 120 to 480V Appliance Power Separate Circuit from 208-240V Hood Power using Remote Shunt Trip Device

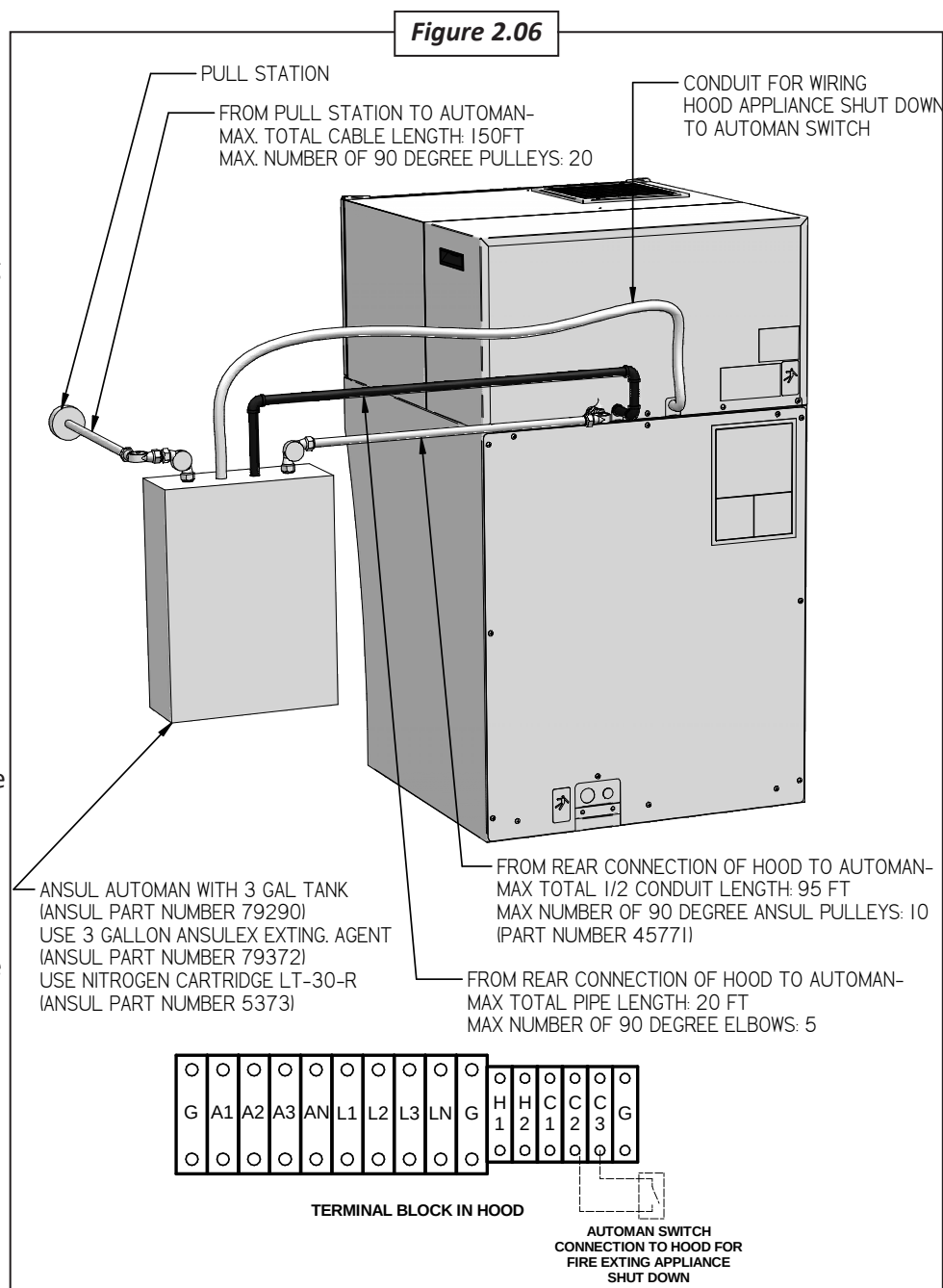
120V to 480V APPLIANCE POWER SEPARATE FROM 208-240 V HOOD POWER (USING REMOTE SHUNT TRIP CONTACTOR SUPPLIED BY LICENSED ELECTRICIAN). Contactor must be a UL Listed, definite purpose, AC resistive, air heating type, suitable for the appliance load. The Installation and connections shall be in accordance with the National Electric Code NFPA 70.



2.06 Fire Suppression System Installation

GVH Ventless Hoods must be protected by the ***Ansul® R-102 Restaurant Fire Suppression System*** in accordance with the hood listing. **Procurement, field installation & set-up, charging, testing and certification of the system is the sole responsibility of the purchaser (NOT included with hood). System must be provided and installed by an authorized Ansul® Distributor/Dealer.** The hood includes factory-installed piping, discharge nozzles, detector link brackets, fusible link cable conduit and wire cable. Piping and conduit are stubbed at back of hood, ready for connection.

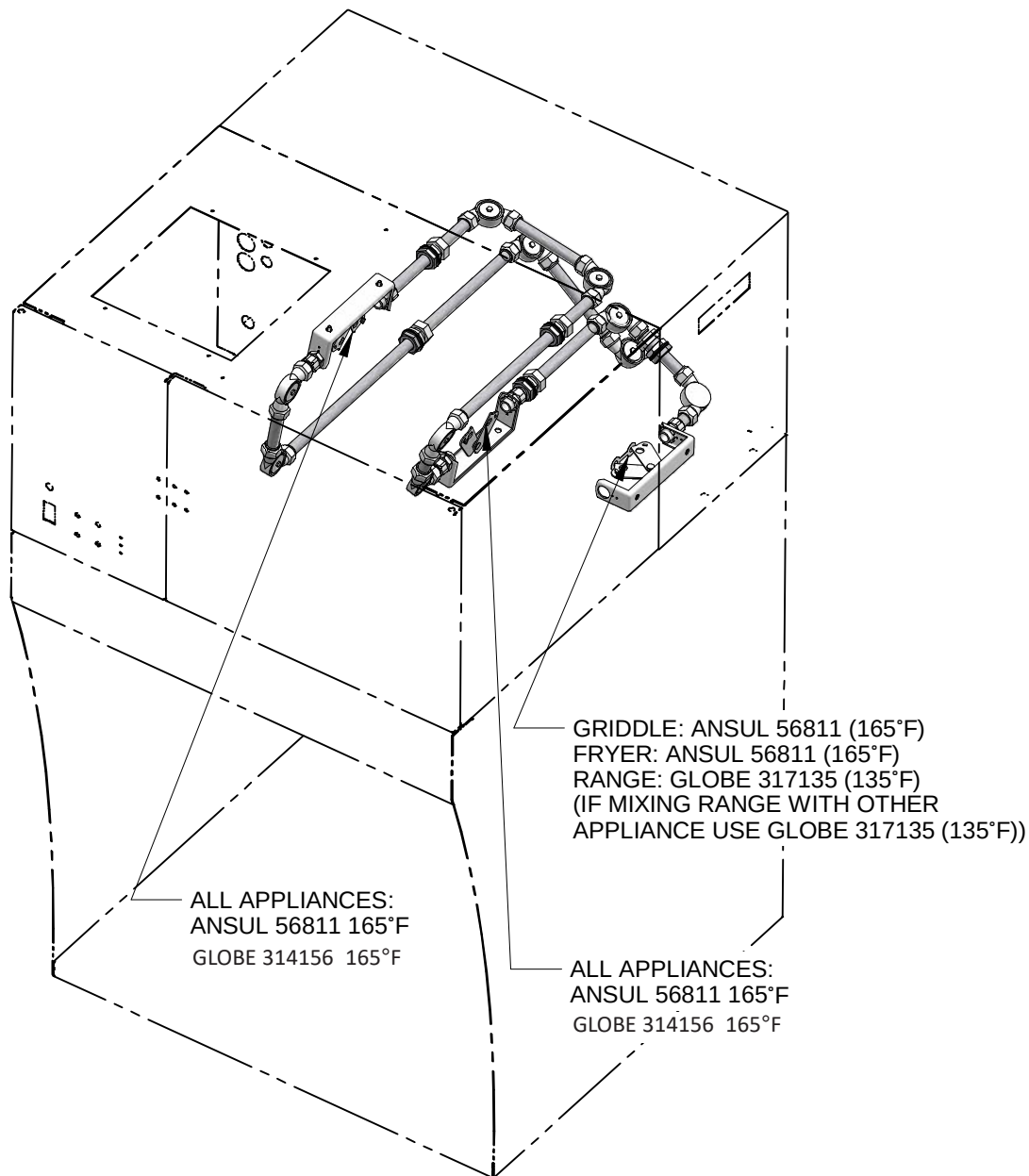
1. Discharge Nozzles: Appliance, Ansul 1-W flow ... Plenum: Ansul 1/2-N flow. See **Section 2.06.2, Fire Extinguisher Nozzle Locations.**
2. Detector links are appliance-specific & must be installed by Ansul agent. See **Section 2.06.1, Detector Link Specification & Location.**
3. The remote Manual Actuation Device of the fire extinguishing system shall be readily accessible, in a path of egress and shall be clearly identified. The installation of the remote Actuation Station shall comply with applicable installation standards and codes, and shall be installed by an Ansul agent.
4. The Regulated Release Assembly with a 3-Gal suppressant tank shall be the mechanical type ... **Ansul® Automan #79290.**
5. See **Figure 2.06** for specific Fire Suppression System installation requirements.
6. The installation, use, and maintenance of the GVH Hood shall be in accordance with the **Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, NFPA 96.**



2.06.1 Fire Suppression Detector Link Specification & Location**NOTE:**

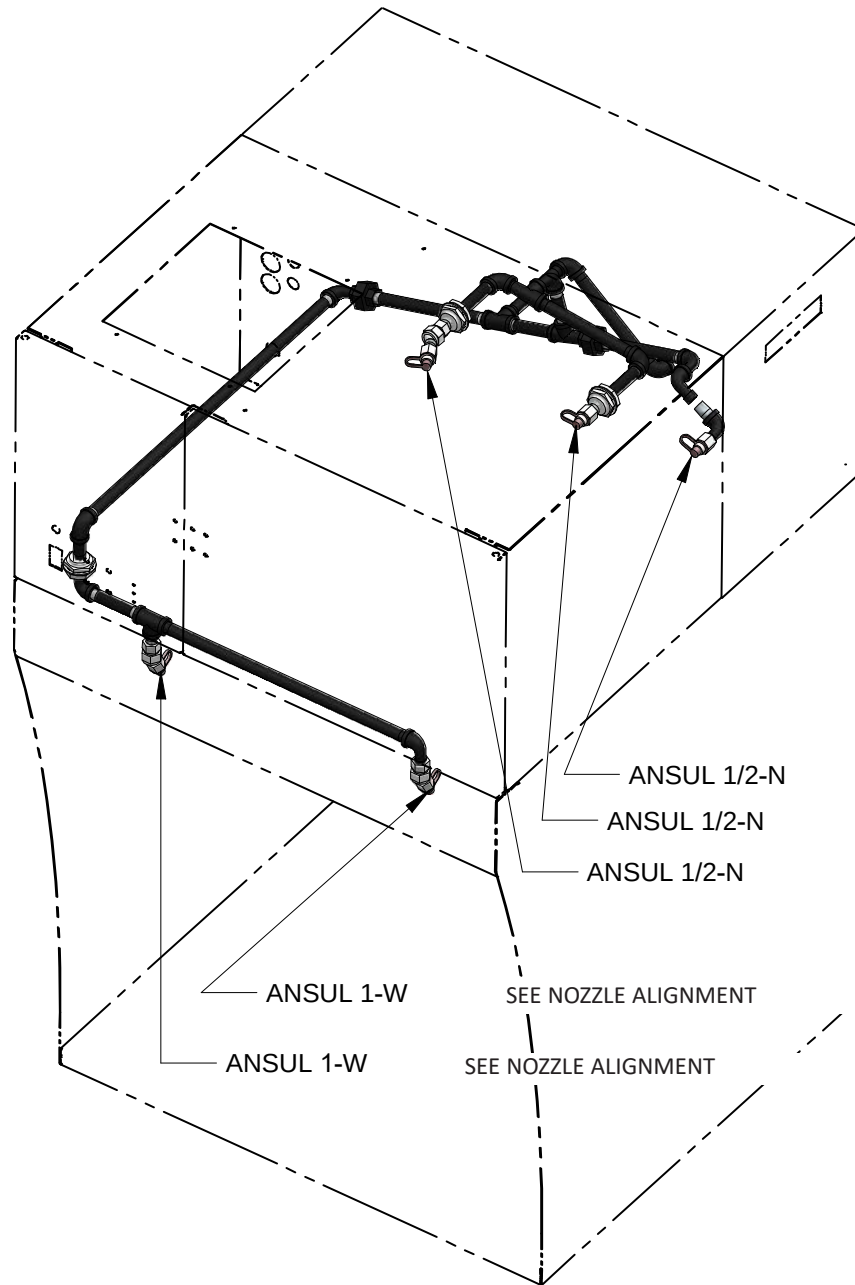
Some of the detector links used in the fire suppression system are specific to the type of appliances to be placed under the hood. See the diagram below for specific manufacturer, temperature rating and part number.

Detector links shall be installed by an authorized Ansul® fire protection agent.



LINK TEMPERATURE AND LOCATION

2.06.2 Fire Extinguisher Nozzle Locations



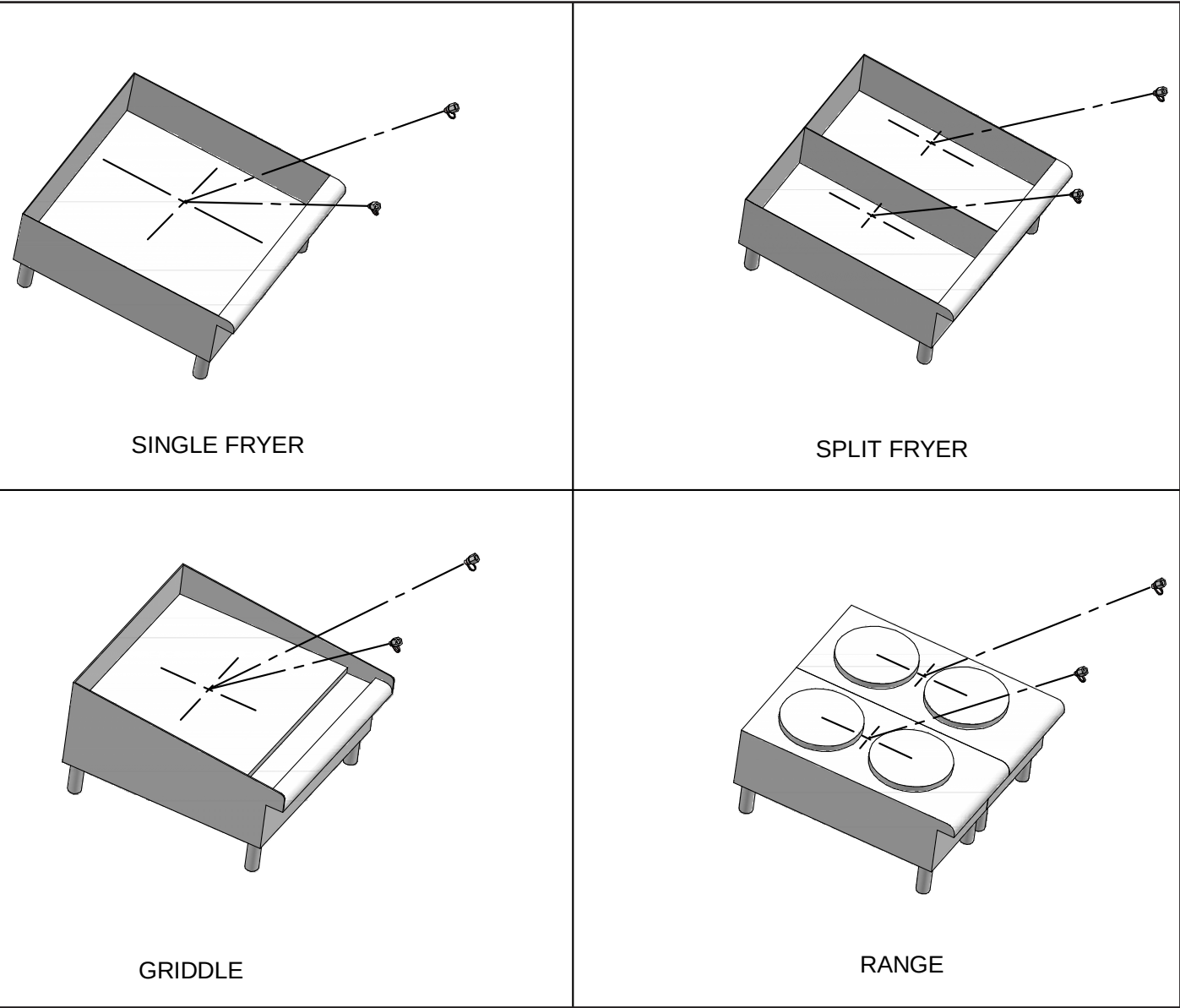
NOZZLE TYPE AND LOCATION

NOTE:

All nozzles are factory-installed.

2.06.3 Fire Extinguisher Nozzle Alignment

Appliance extinguisher nozzles must be aligned as shown for these appliances.



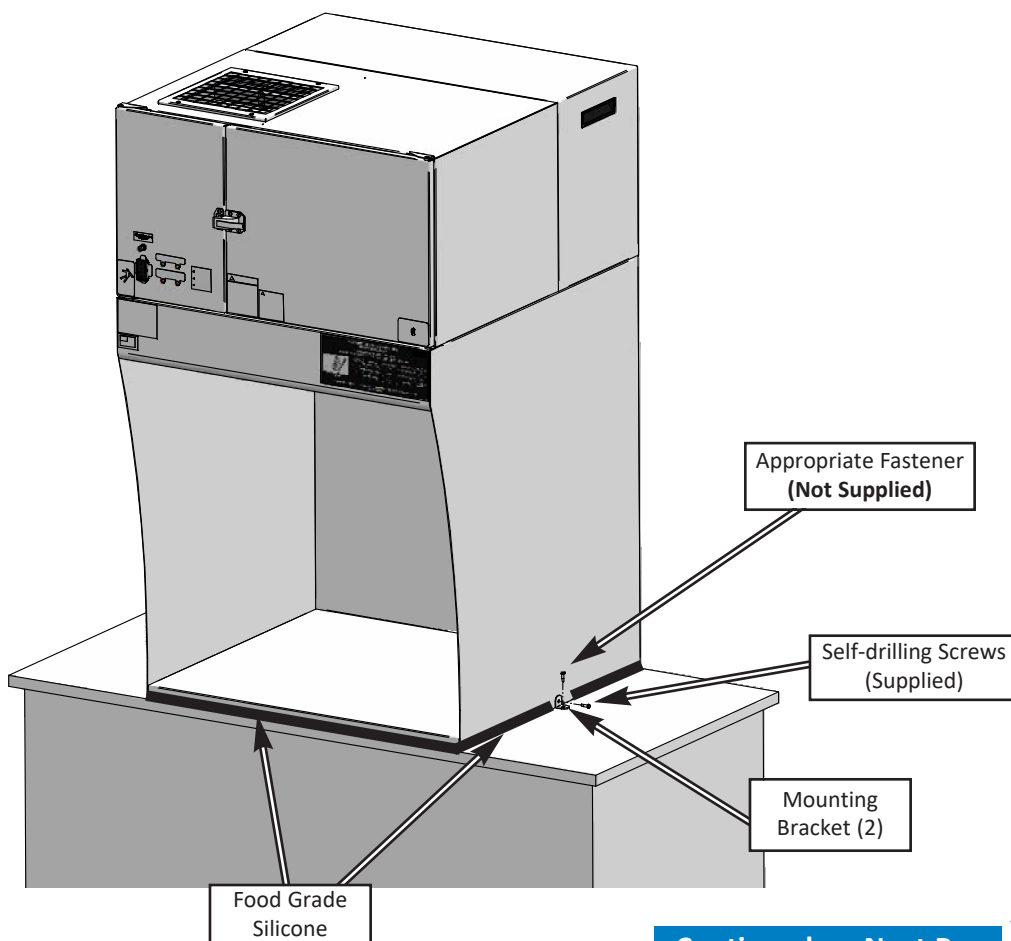
2.07 Final Installation

NOTE:

Before operating the hood, remove all remaining protective film from the outer surfaces of the hood, skirt and base. Clean all exterior sheet metal surfaces with a good quality stainless steel cleaner/polish.

Counter-Top Installation (GVH-C)

1. Confirm that both hood and cooking appliances are properly wired and that installation of the fire suppression system is complete.
2. Ensure that the hood is located in its final position and that it is suitably level and stable.
3. Two (2) mounting brackets are provided for securing the hood to the counter-top, one for each side of the base. They can be placed at most any position along the hood base, but preferably should be located approximately at the midpoint.
4. Use the supplied #10 x 1/2" self-drilling screws to attach the brackets to the base. Use screws which are appropriate for the counter-top material (*not supplied*) to fasten brackets to the counter-top.
5. Apply a bead of food-grade silicone around the entire base perimeter to create a liquid-tight seal and to prevent infiltration of pests.
6. Hood installation must comply with all applicable health and sanitation codes and regulations.



Continued on Next Page

2.07 Final Installation - continued

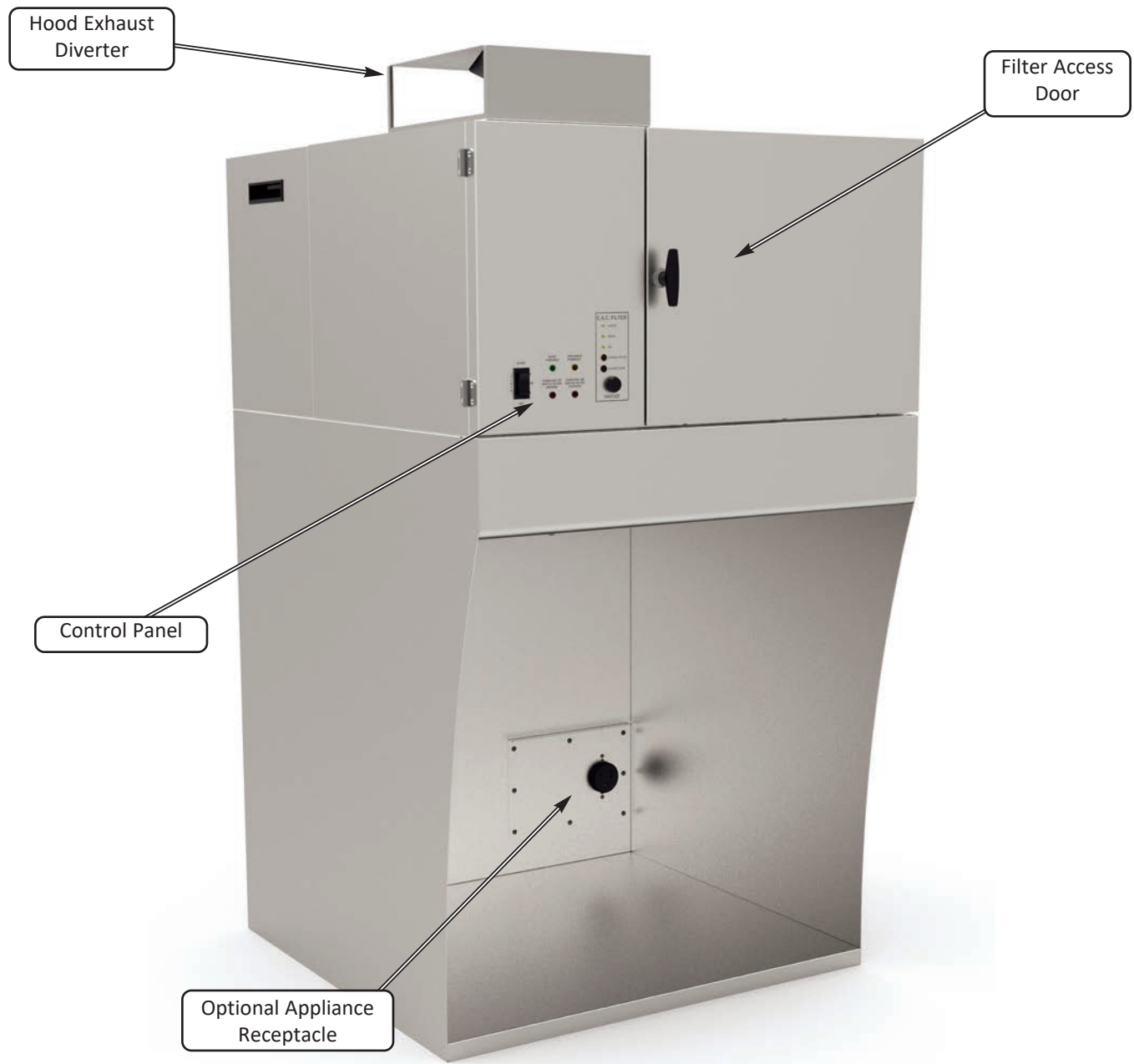
Floor-Stand Installation (GVH-F)

1. Confirm that both hood and cooking appliances are properly wired and that installation of the fire suppression system is complete.
2. Ensure that the hood is located in the final operating location.
3. Level the hood side to side, front to back and corner to corner. Adjust the leveling legs by rotating the lower foot portion of the leg ... turning to the right shortens, turning to left lengthens.
4. After leveling, use appropriated technique and hardware to anchor hood to the floor. Floor plates on the front legs are used for this purpose.

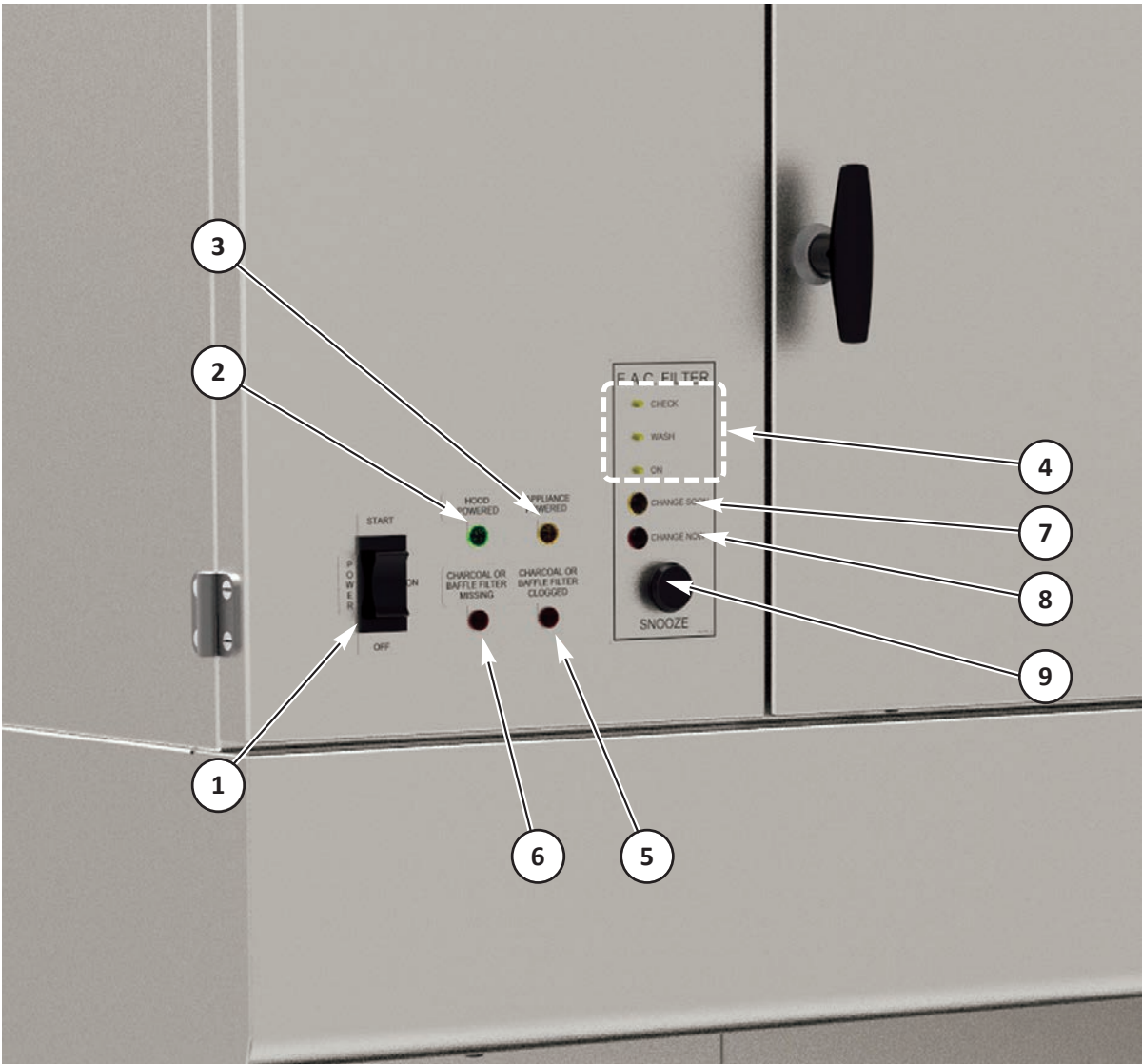


3. Overview

The following section provides a brief overview of the components, functions, and accessories for model **GVH Ventless Hoods**. Please review this section carefully before attempting to operate the unit.

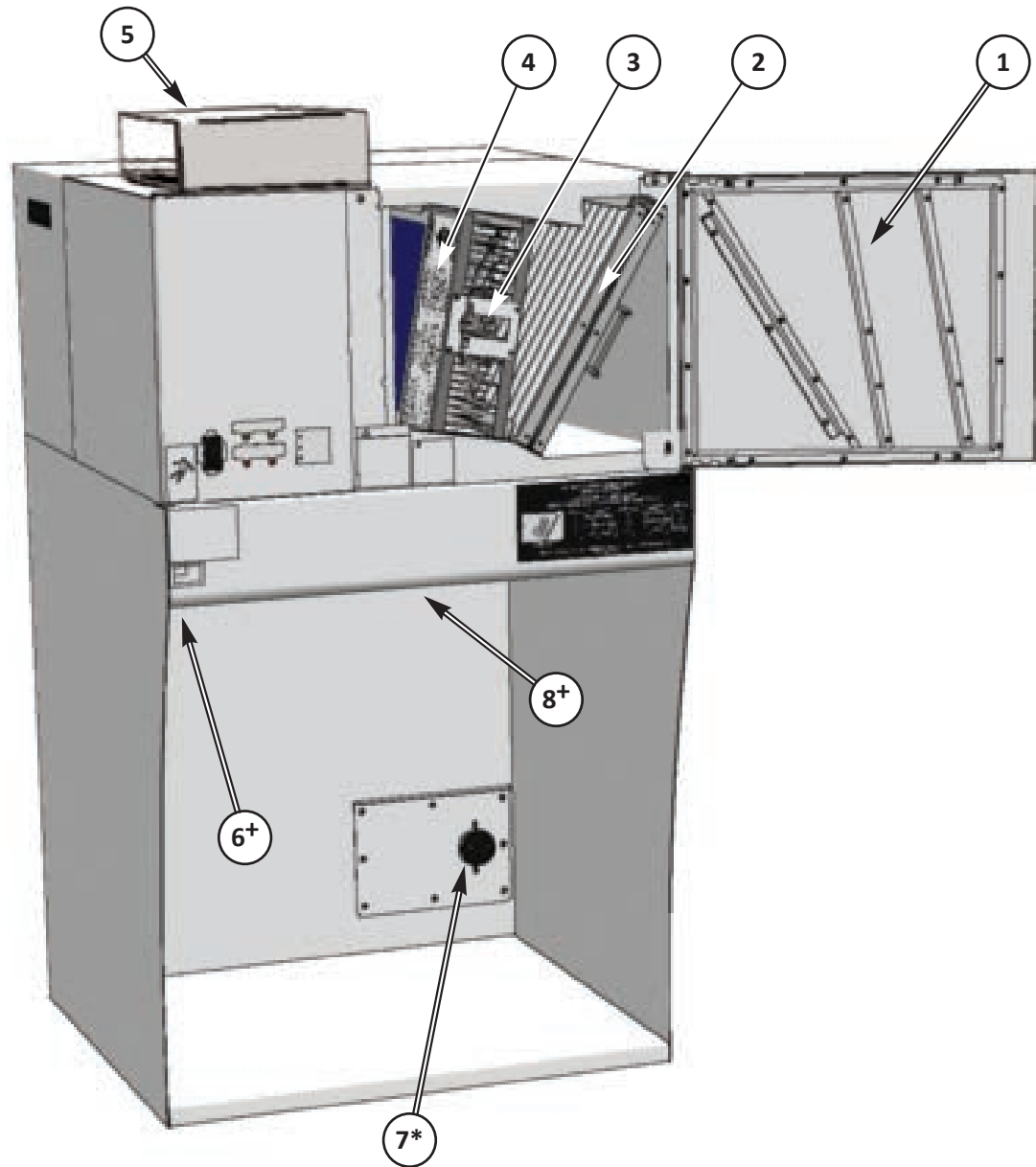


3.01 Control Panel



3.01 Control Panel		
Item	Description	Function
1	POWER Switch (Push-To-Start)	The POWER switch has (3) positions. Pressing & momentarily holding the top [START] portion of the switch starts hood and engages interlock relay to power appliances underneath. When released, switch remains [ON] (centered). Pressing [OFF] (bottom of switch) powers off hood and appliance supply power.
2	HOOD POWERED Light	Green light is ON when the POWER switch is in the [ON] position. The filter access door must be properly closed & secured before hood will power-up.
3	APPLIANCE POWERED Light	Amber light is ON to signal that appliances underneath the hood are receiving power and ready for use.
4	E.A.C. Filter Status Indicators	LED light cluster indicates the status of the Electronic Air Cleaner (E.A.C.) system. [ON] - Turns ON when hood is powered-up. Indicates that the system is powered and functioning normally to clean the air. This will be the only light ON when system is operating properly. [WASH] - Indicates excessive grease build-up on collector fins (dirty), collector cell is missing or has poor contact, too many ionizer wires missing, etc. Approximately 2 minutes after this light turns ON, a beeping alarm will begin sounding and power to appliances is shutdown. IMPORTANT! Do not rely on this indicator as a signal for routine cell cleaning; Giles recommends daily cleaning to maintain peak performance and extend the useful life of charcoal filters. [CHECK] - Indicates that collector cell has stopped operating properly; damaged & shorted to ground, fins shorted due to excessive moisture, etc. No alarm sounds & appliances remain powered, but air cleaning system is not functioning.
5	CHARCOAL OR BAFFLE FILTER CLOGGED Light	Red light will turn ON if either the <i>charcoal or baffle filter</i> is dirty & clogged, or there are other airflow obstructions is present.
6	CHARCOAL OR BAFFLE FILTER MISSING Light	Red light will turn ON if either the <i>charcoal or baffle filter</i> is missing or installed improperly.
7	EAC Cleaning Timer [CHANGE SOON] Indicator	Turns ON when timer enters [WARNING MODE] to indicate that the collector cell must be cleaned within the next 24 hours .
8	EAC Cleaning Timer [CHANGE NOW] Indicator	Turns ON when timer enters [TIMEOUT MODE] to indicate that the maximum time between cleanings has expired. Cell must be cleaned immediately. Power to appliances is shutdown until cleaning is performed. Timer will reset after cleaning.
9	EAC Cleaning Timer [SNOOZE] Button	Pressing button, after [TIMEOUT] is active will return timer to [WARNING MODE] and allows use of appliances for two (2) additional hours . Two (2) [SNOOZE] periods can be used. Afterward, power to appliances is shutdown & locked-out until cleaning is completed.

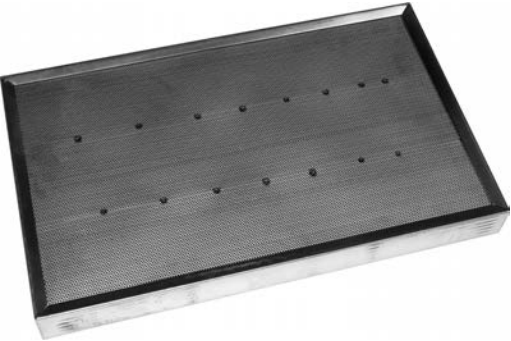
3.02 Hood Front & Filter Chamber



* Optional
+ Not Seen

3.02 Hood Front & Filter Chamber		
Item	Description	Function
1	Filter Access Door	Provides access to all hood filters (baffle, EAC cell & charcoal). Hood will not operate unless door is closed and latched properly.
2	Double Baffle Filter	First stage of the air cleaning system. High-efficiency double-sided baffle filter. Easily removed & hinged for easy daily cleaning.
3	E.A.C. Collector Cell	Cell electrostatically captures and removes very fine grease vapor particulate and smoke generated during cooking. Preferably, the cell <u>must</u> be cleaned daily to maintain hood performance.
4	Charcoal Filter	Activated charcoal helps to control cooking aromas in the recirculated air. Typically, filter requires monthly replacement. Must be replaced with new fresh filter ... NEVER attempt to clean and re-use.
5	Exhaust Outlet w/Diverter	Outlet atop of the unit directs cleaned air back into the space, to the sides and rear. [0"] clearance is required between top of diverter and ceiling or overhead obstructions. Some clearance is preferable to make future movement the unit easier, if needed .
6 ⁺	Grease Drip Cup	Collects grease condensate generated by the baffle filter. Cup should be routinely checked, emptied and cleaned as needed.
7*	Appliance Receptacle (Optional)	Interlocked appliance power receptacle (NEMA), 50A max. Plug appliance power cord directly into hood ... can possibly eliminate need for a separate appliance power supply.
8 ⁺	Under-Hood Light	Fluorescent lighting illuminates the appliance area under the hood.

3.03 Items Shipped with Hood

Part	Description/Part Number	Function
	Baffle Filter (Double, Hinged) P/N 95074	High-efficiency, double-sided filter removes large grease particle contaminant from the air stream.
	EAC Collector Cell Assembly P/N 93302	Captures fine grease & smoke particulate contaminants from the air stream.
	Charcoal Filter P/N 30248	Activated charcoal helps to control cooking odors in the recirculated air.

3.03 Items Shipped with Hood

Part	Description/Part Number	Function
	— SAMPLE ONLY — (1) Can Foaming Crystal Cleaner/Degreaser NSF approved P/N 41510 12-Count Case is Available for Separate Purchase.	Spray on foaming degreaser for cleaning EAC collector cell. <i>Sample can of GILES’ recommended collector cell cleaner.</i> It is readily available from Giles and on-line distributors, as well as at nationwide retail outlets.

4. Operation & Filter Maintenance

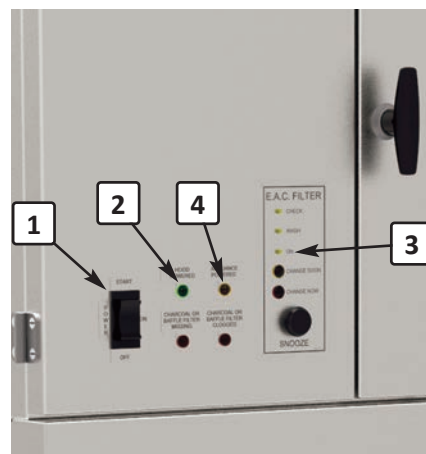
This section explains operation, care, and filter & general maintenance information.

4.01 Hood Operation

Before starting the hood, confirm that all filters are in place and properly seated. **The filter access door must be closed and securely latched or the hood will NOT operate.**

To Start Hood:

1. Press and momentarily hold the **[START]** portion (*top*) of the **POWER** switch ① until the hood fan starts running, then released. Switch will spring back and remain in the centered **[ON]** position.
2. The green **[HOOD POWERED]** light ② should turn ON.
3. The **E.A.C. FILTER [ON]** light ③ will illuminate.
4. An alarm may sound briefly until fan reaches speed, then amber **[APPLIANCE POWERED]** light ④ will turn ON, indicating that power is supplied to the cooking appliances and they are ready for use.
5. Should the alarm continue to sound, any other indicator lights turn ON, and if the **[APPLIANCE POWERED]** light does not turn ON, refer to **Troubleshooting Section** of this manual.



IMPORTANT!: It will be necessary to restart hood in this manner after any interruption of power.

To Shutdown Hood:

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

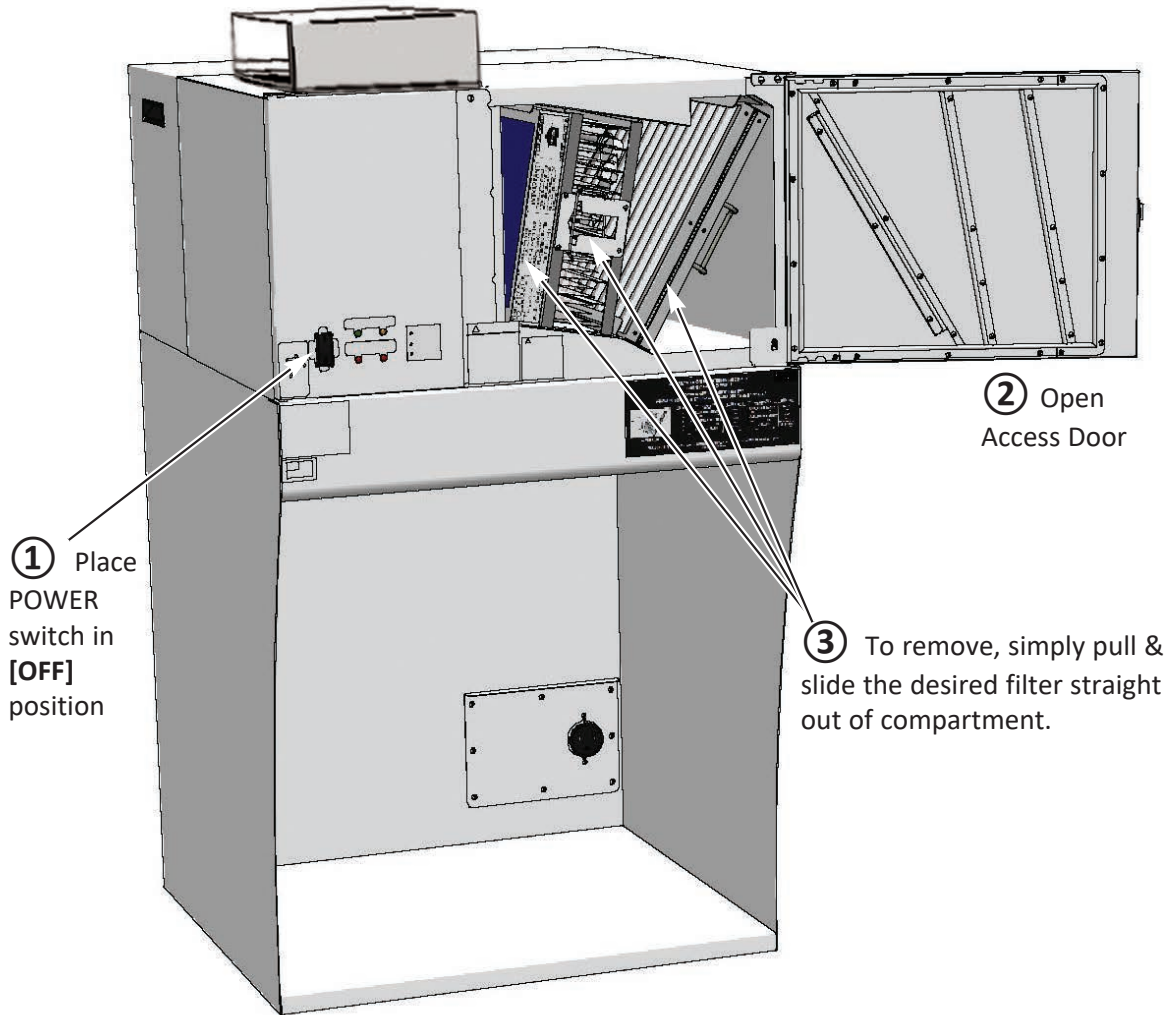
4.02 Filter System, Filter Maintenance & Filter Alarms

The air cleaning system consist of three (3) stages. This section explains the filter maintenance and cleaning procedures necessary to keep the system functioning at peak performance, and hood alarm conditions.

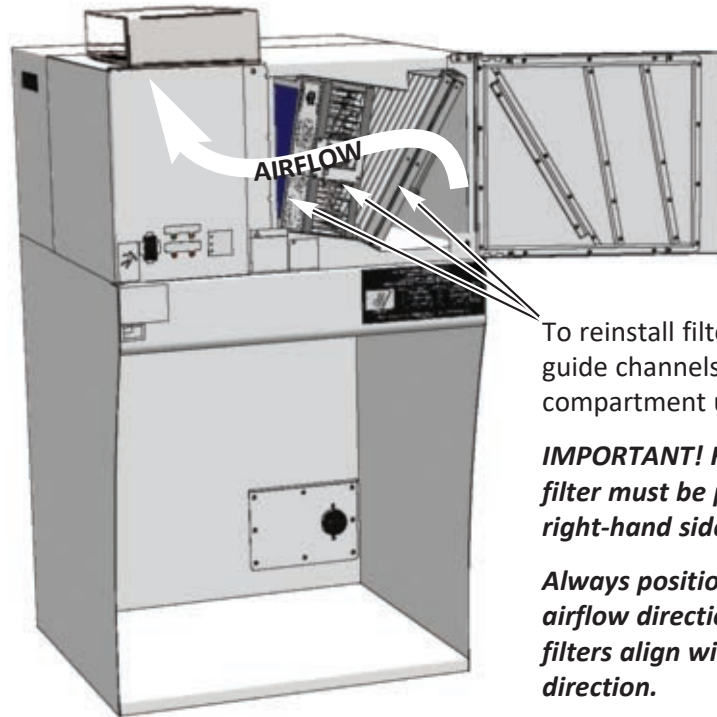
4.02.1 Ventless Hood Filter Table

Filter	When to Clean/Replace	How to Remove	How to Clean	How to Install
Double Baffle Filter	Daily cleaning recommended	Section 4.02.2	Section 4.03.1	Section 4.02.3
E.A.C. Collector Cell	Clean daily	Section 4.02.2	Section 4.03.2	Section 4.02.3
Charcoal Filter	Replace every 30 to 40 days (approx.)	Section 4.02.2	Replace ONLY ... NEVER attempt to clean. Section 4.03.3	Section 4.02.3

4.02.2 Filter Removal - Baffle, E.A.C. Cell & Charcoal



4.02.3 Filter Installation - Baffle, E.A.C. Cell & Charcoal



To reinstall filters, align with the guide channels and slide straight into compartment until filter hits a stop.

IMPORTANT! Handles of the baffle filter must be positioned toward the right-hand side of hood.

Always position filters so that any airflow direction arrows on the filters align with the hood airflow direction.

Close and latch access door

4.02.4 Hood Filter Alarms

4.02.4.1 Charcoal or Baffle Filter Missing

If the **charcoal** and/or **baffle filter** is not in place, or not positioned properly, the red [CHARCOAL OR BAFFLE FILTER MISSING] light will turn ON. Power supply to cooking appliances under hood is turned OFF until the condition is corrected ... amber [APPLIANCE POWERED] light turns OFF. No audible alarm will sound for this condition.

- Hood fan continues to run ... turn OFF hood power.
- Confirm that both filters are in place. See **Sections 4.02.3, Filter Installation**.
- Inspect filter positioning. Remove and reinstall to ensure they are seated properly in the guides and are pushed fully into the filter compartment. Be sure access door closes and latches securely. Filters must actuate a proofing switch located on the rear wall of the filter compartment.



4.02.4.2 Charcoal or Baffle Filter Clogged

Alarm occurs when the **baffle** and/or **charcoal filter** become clogged, or other restrictions are present that reduce airflow to a level below the minimum required for effective capture of cooking vapors. A **continuous tone alarm** will sound and the red **[CHARCOAL OR BAFFLE FILTER CLOGGED]** light will turn ON ... the amber **[APPLIANCE POWERED]** light turns **OFF** and power supply to appliances under hood turns **OFF** until the condition is corrected.

- Hood fan continues running ... turn OFF hood power.
- Clean the baffle filter; see **Section 4.03.1, Baffle Filter Cleaning**.
- Replace charcoal filter with fresh new filter; **4.03.3, Charcoal Filter Maintenance**.
- Inspect the hood plenum to ensure there are no obstructions.
- Check the hood exhaust outlet ... be sure that nothing is significantly obstructing airflow from the hood exhaust.



4.02.4.3 E.A.C. Filter Status & Alarm

Three small LED indicator lights on the control panel show the operational status of the E.A.C. air cleaning system.

[ON] Indicates that the E.A.C. cell is installed, powered and operating. Will be the only light ON when system is operating properly.

[WASH] light turns ON to indicate:

- Collector cell is not installed or is mis-aligned.
- Collection fins contain excessive amount of grease residue.
- Poor contact between filter cell & hood contact plate.
- Too many ionizer wires missing.

When **[WASH]** light is ON, an alarm condition exists and air cleaning is not occurring. After approximately two (2) minutes, a **beeping alarm tone** will begin sounding and shortly thereafter, supply power to cooking appliances under hood is shutdown ... **[APPLIANCE POWERED]** light turns OFF.



[WASH] light is NOT intended to be the notification for routine cell cleaning ... DO NOT use as such. Generally, the collection cell must be cleaned DAILY to ensure optimum performance. See Section 4.03.2, EAC Filter Cell Cleaning.

[CHECK] light turns ON to indicate:

- Ionizer wires are broken and shorted out against the cell frame.
- Cell is damaged and has shorted out to ground.
- Collection fins shorted out because excessive moisture has formed on them.

When **[CHECK]** light is ON, the hood will continue to run and cooking appliances remain powered, however the system is no longer operating to clean the air . **DO NOT CONTINUE OPERATIONS WHEN THIS CONDITION EXIST ... STOP AND INSPECT! Call for service if necessary.**

The following actions may clear the alarm condition:

1. Turn hood power switch OFF.
2. Remove the E.A.C. cell and clean as described in **Section 4.03.2**.

4.02.4.3 E.A.C. Filter Status & Alarm - continued

3. Inspect cell for broken or missing ionizer wires, bent fins, or other damage. Ionizer wires are replaceable (*when ordering replacements, note that the GVH hoods use 20" wires*). Bent fins may be gently straightened by hand, such that no fins are touching adjacent fins. If cell is damp with moisture, allow it to air dry. Excessively damaged cells (broken or badly bent frame, broken insulators, etc) must be replaced.
4. Inspect the E.A.C. contact pad inside hood. Clean grease accumulation away with a mild degreasing cleaner and dry thoroughly.
5. Replace collector cell (**Section 4.02.3**) and restart hood (**Section 4.01.1**). If the condition persist or if none of the LED lights turn ON, the EAC power supply may be faulty ... call for service.

4.03 Filter Maintenance

4.03.1 Baffle Filter Cleaning



The stainless steel baffle filter is fabricated from thin gauge sheet metal that can potentially present sharp edges. Exercise due care when handling and cleaning to avoid injury. ***It is recommended to wear heavy-duty rubber gloves.***

Cleaning frequency can depend on types of cooking appliance being used, but daily cleaning is, typically, preferred. Rotate the thumb-turns to the unlocked position and open the filter halves. Clean in sink with a mild, biodegradable, degreasing cleaner (***Giles recommends Simple Green®Crystal Foaming Cleaner***). Rinse and dry thoroughly. Close filter halves, secure the locking thumb-turns and reinstall. Generally, the baffle filters may be washed in a dishwasher.

Ensure that filter is completely dry before reinstalling. NEVER PLACE WET FILTER INTO HOOD!

4.03.2 E.A.C. Filter Cell Cleaning



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

The E.A.C. collector cell is sustainable and renewable; it should last for years if cleaned and handled properly. To maintain peak performance, it **MUST BE CLEANED DAILY**. Failure to do so can lead to interruptions in cooking appliance operation, premature failure of the electronic cleaning system, or reduced useful life of consumable charcoal filters. Follow the procedures detailed below for effective cleaning.

IMPORTANT:

- The cell **CANNOT** withstand washing in commercial dishwashing equipment.
- Many commercial cleaners are not safe for aluminum ... using the recommended cleaners is advised.
- Dishwashing detergents are generally not suitable ... they can cause oxidation, or create a film on aluminum collection fins that will lead to malfunction and result in interruption of power to under-hood cooking appliances.

4.03.2 E.A.C. Filter Cell Cleaning - continued

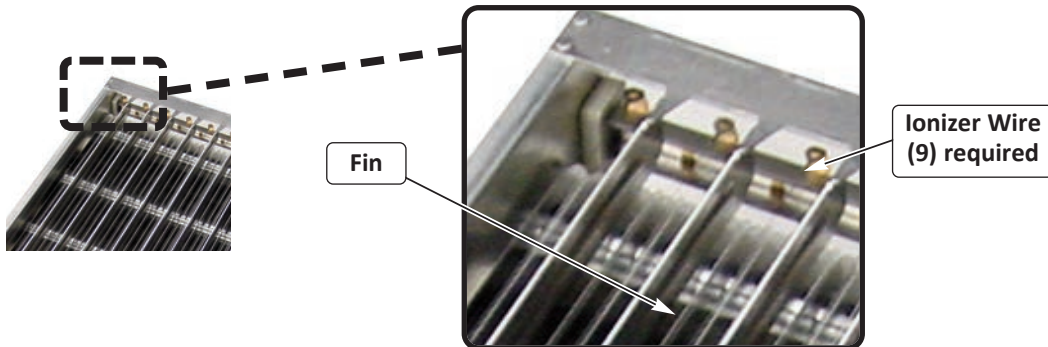
Two (2) cleaning methods and products are sanctioned by *GILES Food Service*, as follows.

- **Spray Foam Method (Preferred):** Uses **Simple Green® Crystal Foaming Spray Cleaner/Degreaser** ... a readily available foaming aerosol that is an exceptionally effective cleaner, as well as being safe for aluminum (**NSF approved**, food-grade, non-toxic, and biodegradable). Cleaning the E.A.C. cell is quick and easy with this convenient ready-to-use cleaner. A complimentary sample has been supplied. Operational usage quantities can be ordered through *Giles dealers*, **item #41510 (12-count case)** ... it is also available from many national retail outlets. When used as directed, a case of product should last 4 to 5 weeks, depending on cooking activities.
- **Soak Method (Alternative):** Uses a diluted solution of **Simple Green® Pro-HD** and water. Although not as convenient as the spray cleaner, this procedure has proven to be very satisfactory for cleaning E.A.C. collector cells for many years. This product has the same characteristics as the spray product, but requires mixing with water before use in a **dilution of 1:12**, e.g. mix 1/2 gal. of cleaner per 6 gals. of water.



CAUTION

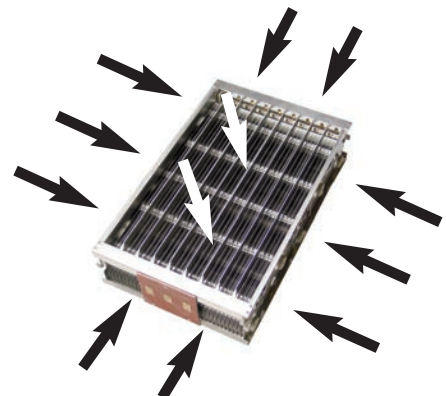
While handling and cleaning the cell, take care not to bend the collection fins or break the fine ionizer wires that are stretched across the cell face. Bent fins and broken/missing wires can prevent the electronic collection system from performing properly. System faults and alarms will occur that can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



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

4.03.2.1 E.A.C. Cell Cleaning - Preferred Spray Method

1. Remove collector cell from hood (see **Section 4.02.2**) and lay on a drain board, or other suitable surface.
2. Holding can at an appropriate distance, spray **Simple Green® Crystal Foaming Degreaser** onto the E.A.C. cell, completely covering all surfaces ... collection fins, contact plate, brass fittings and inside corners of frame. Turn cell over and apply to the other side in like manner, ensuring that both sides of all collector fins are completely covered with the foam.
3. Allow foam to soak for **5 to 10 minutes**. In cases of extreme build-up, a second application may be required after rinsing.



Continued on Next Page

4.03.2.1 E.A.C. Cell Cleaning - Preferred Spray Method (continued)

- Carefully move cell to sink and rinse thoroughly, using hot water spray. **Rinse ONLY, DO NOT scrub with brushes.**
- On a drain board, stand cell upright on end with contact plate up ... allow it to drain and air dry overnight. Cell must be completely dry before being replaced in hood. If desired, a small electric fan can be used to blow across the cell to help expedite drying.
- 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 for cleaning cell in this manner. Other spray cleaner products may contain corrosive ingredients that can damage the metal components, causing it to fail or not perform properly. Such damages are not covered by the factory warranty.

4.03.2.2 E.A.C. Cell Cleaning - Alternative Soak Method

The factory-recommended product to use for cleaning the E.A.C. cell in this manner is **Simple Green® Pro-HD**. It is a readily available, biodegradable, non-toxic degreasing cleaner that is safe for use on aluminum. It performs well to clean the cell when diluted at a **1:12 ratio** (e.g. 1/2 gal. cleaner to 6 gals ambient water).

DO NOT use DISHWASHING DETERGENTS or CORROSIVE CLEANERS as they can contain ingredients that may damage metal cell components, causing failure or unsatisfactory performance. Such damages are not covered by the factory warranty.

- Cleaning with 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 for it to be submerged completely for soaking (either standing on end, edge, or lying flat).
- Fill container with fresh water to a level that will basically cover the cell. Measure 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. 8 gals of water would require 2/3 gal (2 qts+21-1/2 ozs) of 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 the cleaner & fill to the marked "FILL" line with clean water.**

4.03.2.2 E.A.C. Cell Cleaning - Alternative Soak Method (continued)

3. After preparing the proper quantity of degreasing solution to completely cover cell in the soak container, hold cell by the contact plate ①, frame, or the handle and carefully place it into the solution. Be sure it is fully submerged.
4. Allow cell to soak for approximately **20 minutes (no more than 30 mins)**, then lift it slightly and agitate it up & down briefly in the solution to help dislodge grease residue.
5. Carefully remove cell from container and follow **Steps 4 thru 6** as previously detailed in **Section 4.03.2.2**.



NOTE:

The degreasing solution can be used multiple times ... to prevent contamination, place a lid or other suitable cover on container when not using. Discard and replenish the degreasing solution when a greasy film remains visible on the surface of the liquid.

When soaking, always ensure that the solution completely covers the cell ... add some water if needed.

4.03.3 Charcoal Filter Maintenance

CAUTION

NEVER attempt to clean and reuse a Charcoal Filter. Doing so can result in hood damage or malfunction.

The charcoal filter is a single-use, consumable item which must be routinely replaced with a **fresh new filter**, see **Sections 4.02.2 & 4.02.3**. **Charcoal filters CANNOT be cleaned and reused.**

Typical replacement frequency is **30 to 40 days**, depending on foods being cooked & activity.

Use Giles replacement **Item No. 30248**. Record date on the new filter as reference.

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

4.04 E.A.C. Filter Cell Cleaning Timer Operation

The hood is equipped with an **E.A.C. Filter Cell Cleaning Timer**. The feature was designed to help users maintain the proper cell cleaning routine. Timely cleaning is essential to ensuring the hood continues to effectively clean the recirculated air.

After a preset amount of elapsed time, a notification signal is issued indicating that the collector cell needs to be cleaned (*or exchanged with a clean cell*). If cleaning (*or exchange*) is not completed within a certain amount of time, the timer expires, the hood and supply power to cooking appliances is shutdown and will remain OFF until cleaning (*or exchange*) is performed. When the necessary filter maintenance is completed, the timer automatically resets and normal operation can be continued ... a fresh timer countdown starts.

Should a shutdown occur during a peak demand period or while cooking is in progress, a **SNOOZE** feature is provided to temporarily continue operation for a short time.

Timer indicator lights and **[SNOOZE]** Button are located on the hood control panel.

Timer Operation:

① **CHANGE SOON**

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

② **CHANGE NOW**

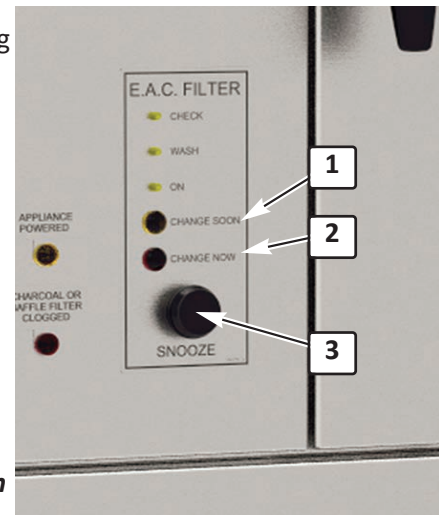
The red indicator turns ON when timer enters **[TIMEOUT]** mode, notifying that allowed time between cleanings has expired. A continuous alarm sounds and appliance supply power is turned OFF. Power will remain disabled until cleaning (*or exchange*) is completed. The hood **[POWER]** and **[APPLIANCE POWERED]** lights will turn OFF.

Placing the **POWER** switch in the **[OFF]** position silences alarm, but the hood will not restart until the timer is reset by cleaning (*or exchanging*) the cell.

③ **SNOOZE Button**

In the event that **[TIMEOUT]** occurs during a period of high customer demand or while cooking is in progress, a snooze feature may be used. Pressing the **[SNOOZE]** Button will temporarily reset the timer to **[WARNING]** mode for a period of **two (2) hours**, allowing continued operation. **NOTE: Hood must be restarted as described in Section 4.01.**

Two (2) snooze periods are allowed. During a second snooze period, the **[CHANGE SOON]** light flashes, indicating the timer is in the final snooze period. After the second snooze period expires, hood and appliance supply power is locked-out until the E.A.C. cell is cleaned (*or exchanged*).





5. Hood Cleaning & Maintenance

This section describes general cleaning & maintenance activities for **GVH model hoods**. Attention to these procedures will help ensure the hood remains in good operating condition and continues to run efficiently and safely.

Code officials in some jurisdictions may require that owner/operators maintain an accessible, permanent record of these equipment inspections and maintenance activities, along with any repairs accomplished.

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

The hood design incorporates interlock switches to ensure that the unit will shutdown when certain conditions exist that are inconsistent with safe and effective operation. The interlocks should be tested **monthly** as described below. Results of these inspections should be recorded in a log maintained by the owner. If problems are detected, contact **GILES** or an authorized service provider. **NOTE: Anytime the filter access door is opened and reclose, the hood must be restarted by pressing and momentarily holding the [START] portion (top) of the POWER switch.**

1. **Door Test:** Start hood ... with hood running, unlatch and slightly open the *filter access door*. Confirm that hood powers OFF when door is opened and that appliances under hood turn OFF, or will not turn ON.
2. **Baffle Filter Test:** Remove the *baffle filter*, then close and latch *access door*. Start hood ... the red **[BAFFLE OR CHARCOAL FILTER MISSING]** light should turn ON and the **[APPLIANCE POWERED]** light should be OFF. Check to ensure that appliances under hood will not turn ON. Reinstall the *baffle filter*, see **Section 4.02.3**.
3. **Charcoal Filter Test:** Same procedure as #2 above except remove the *charcoal filter*, then proceed as described above. Reinstall the *charcoal filter*, see **Section 4.02.3**.
4. **E.A.C. Filter Test:** Same procedure as #2 & #3 above except remove the *E.A.C. collector cell*, close and latch *access door*. Start the hood ... verify that **[ON] & [WASH]** E.A.C. Status Lights come ON, along with the amber **[APPLIANCE POWERED]** light. Wait approx. two (2) minutes. A beeping alarm should begin sounding. In several seconds the **[APPLIANCE POWERED]** light should turn OFF. Check to ensure that appliances under hood will not turn ON. Reinstall the *E.A.C. cell*, see **Section 4.02.3**.
5. **Filter Clogged Test:** ***Perform this test ONLY after installing a new charcoal filter.*** Start hood normally and allow it to run. Use cardboard or other material to completely block the 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 red **[BAFFLE OR CHARCOAL FILTER CLOGGED]** light should turn ON and the **[APPLIANCE POWERED]** light should turn OFF. Check to ensure that appliances under hood will not turn ON. Remove the obstruction ... the alarm should silence and the **[APPLIANCE POWERED]** light should turn back ON.

Should any of the tests fail to yield the described results, contact a factory-authorized service company and have the unit evaluated and repaired. Call **Giles Services** at **800-554-4537 (or email services@gfse.com)** for assistance with locating an authorized service company in your area.

5.02 Quarterly Hood Cleaning

CAUTION

- DO NOT** wash down hood with water from a spray hose.
- 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.

To maintain effectiveness and performance, the hood should be deep cleaned every 3 months (*at a minimum*).

1. Disconnect power to the unit at the electrical panel circuit breaker.
2. Unplug and remove cooking appliances from under hood.
3. Remove all filters.
4. **Giles recommends Simple Green® Crystal Foaming Spray Degreaser/Cleaner for general cleaning of the hood.** Use a towels or sponge to clean the entire hood plenum, removing grease film accumulation from interior surfaces. Take care when cleaning near the fusible detector links in the plenum. Inspect the hood fan and clean grease build-up from the fan blades, if possible.
5. Thoroughly clean the inside surfaces of the under-hood area (*skirt or stand*) and all exterior surfaces with the mild degreaser or a good quality stainless steel cleaner.
6. Wipe dry with clean towels ... be sure hood is thoroughly dry.
7. Clean *baffle filter & E.A.C. cell* see **Sections 4.03.1 & 4.03.2**. If necessary, obtain and install a *fresh new charcoal filter*. Reinstall all filters, see **Section 4.02.3**.
8. Restore power to the hood and reposition under-hood appliances.

5.03 Fire Suppression System Maintenance

The fire extinguishing system must be maintained in accordance with the **Standard for Wet Chemical Extinguishing Systems, NFPA 17A** and with the instructions of the system's manufacturer/installer.

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

Consult the Fire Suppression System documentation provided by the system installer for complete maintenance guidelines.

5.03.1 Semi-Annual (6-Month) Fire Suppression System Inspection & Maintenance

As a minimum, field inspection of the fire suppression system must be conducted semi-annually (every 6 months). Such inspection and maintenance shall consist of the following:

1. Assess operations and confirm that the potential fire hazard has not changed.
2. Inspect suppressant storage tank for fill level.
3. Remove firing cartridge ... inspect and test the mechanical release mechanism.
4. Inspect extinguisher nozzles to ensure they are free of grease build-up. Confirm that all blow-off caps are in place and in good condition ... replace as needed. See **Section 2.05.2, Fire Extinguisher Nozzle Locations**.
5. Inspect and test the remote manual activation station for function and wear.
6. Install test a link in a detector bracket and test automatic actuation function.
7. Inspect and clean detector links. Confirm that detector links are the correct temperature rating. See **Section 2.05.1, Fire Suppression Detector Link Specification & Location**.
8. Inspect link conduit and wire cable for wear at pulleys and detectors ... replace if necessary.
9. Record maintenance date and service performed in a permanent file. Attach a signed-off approval tag to system in a conspicuous location.

5.03.2 Annual (12-Month) Fire Suppression System Inspection & Maintenance

The annual inspection & maintenance shall be same as the **semi-annual** except:

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

5.03.3 12-Year Fire Suppression System Inspection & Maintenance

Shall be same as **annual inspection & maintenance** except for the following:

1. Replace wet-chemical fire suppressant.
2. Hydrostatic test and certify Suppressant Tank and Compressed Gas Charging Cartridge. Acceptable to replace these components with new parts.
3. Flow test the regulator.

6. Troubleshooting

This section describes basic troubleshooting procedures for model **GVH Recirculating Hoods**. Generally, troubleshooting and/or repairs should only be performed by trained and qualified service technicians. Troubleshooting by users should be limited to issues and/or activities that are operational or procedural in nature.

DANGER

- Troubleshooting for electrical problems should be performed **ONLY** by trained qualified service technicians or electricians. Serious injury, or even death, will result from contact with energized electrical circuits.
- **Failure to comply with DANGER notices will result in death or serious injury, equipment or property damage, and void the warranty.**

6.01 Procedures

Problem	Probable Cause	Corrective Action
Hood will not turn ON	a. Filter Access Door not closed	Close & latch Access Door.
	b. Improper start-up method	Press & momentarily hold in top [START] portion of power switch.
	c. Power Switch is faulty	Replace Power 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 and main breaker box.
[CHARCOAL OR BAFFLE FILTER MISSING] light ON at start-up	a. Baffle or Charcoal Filter is not installed or not properly seated	Install appropriate Filter and/or check alignment in track.
EAC [WASH] light ON & intermittent (beeping) alarm sounding	a. Excessive film build-up on fins	Clean the EAC cell, Section 4.03.2
	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	Have plate inspected, replace if needed.
EAC [CHECK] light ON; no alarm sounding	a. EAC shorted to ground (damaged)	Replace or repair the EAC cell.
	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, etc.

6.01 Procedures - continued

Problem	Probable Cause	Corrective Action
Under-hood Appliance will not power-up: • [HOOD POWERED] light ON • [CHARCOAL OR BAFFLE FILTER MISSING] light ON • [APPLIANCE POWERED] light OFF	a. Baffle Filter missing or not properly installed	Install Baffle Filter / check alignment.
	b. Charcoal Filter missing or not properly installed	Install Charcoal Filter / check alignment.
	c. One or both Filter switches are faulty	Test & replace as needed.
Under-hood Appliance will not power-up: • [HOOD POWERED] light ON • [CHARCOAL OR BAFFLE FILTER CLOGGED] light ON • [APPLIANCE POWERED] light OFF • Continuous tone alarm sounding.	a. Baffle or Charcoal Filter clogged	Replace Charcoal Filter or clean Baffle Filter.
	b. Hood exhaust outlet excessively block	Confirm exhaust is clear of any obstruction around diverter.
	c. Vacuum Switch (clogged filter sensor) 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 film	Check voltage and inspect blower, clean if needed
Under-hood Appliance will not power-up: • [HOOD POWERED] light ON • [WASH] light ON • [APPLIANCE POWERED] light OFF • Intermittent tone (beeping) alarm sounding.	a. Excessive film built up on collector fins; too dirty	Clean the EAC cell, Section 4.03.2.
	b. EAC cell is not installed	Install clean EAC cell.
	c. EAC driver board is faulty	Test & replace EAC power supply if
	d. Poor connection at contact plate, dirty contacts, cell mis-aligned, faulty contacts.	Check cell position, clean contacts, inspect contact plate & replace if needed.
Under-hood Appliance operates: • [HOOD POWERED] light ON • [CHECK] light ON • [APPLIANCE POWERED] light ON • No alarm sounding, although cell is NOT cleaning air.	a. Ionizer wire broken & touching chassis.	Replace ionizer wire.
	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 when Power Switch is ON.	a. Fluorescent bulb burned out	Replace bulb.
	b. Ballast is faulty	Replace ballast.
	c. Fuse is blown	Check and replace fuse.



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 repair/service parts direct to end users. Parts are available through authorized service agents, part distributors, and/or kitchen equipment dealers. If assistance with sourcing parts or obtaining equipment repair service is required, please contact a *GILES* Manufacturer's Representative for information concerning authorized sources near you. For further assistance you may contact ***GILES Services Support*** as follows:

IN THE UNITED STATES & CANADA call: 800.554.4537

ALL OTHERS call: 334.272.1457

Normal business hours are **8:00 AM to 5:00 PM Central Time** ... calls are answered by an automated phone attendant system ... please follow the recorded instructions to reach the desired department or individual.

If calling outside of normal hours, leave a voicemail message along with your contact information and a *Services Representative* will return your call as soon as possible, usually within thirty (30) minutes ... ***a representative is available 24/7/365.***

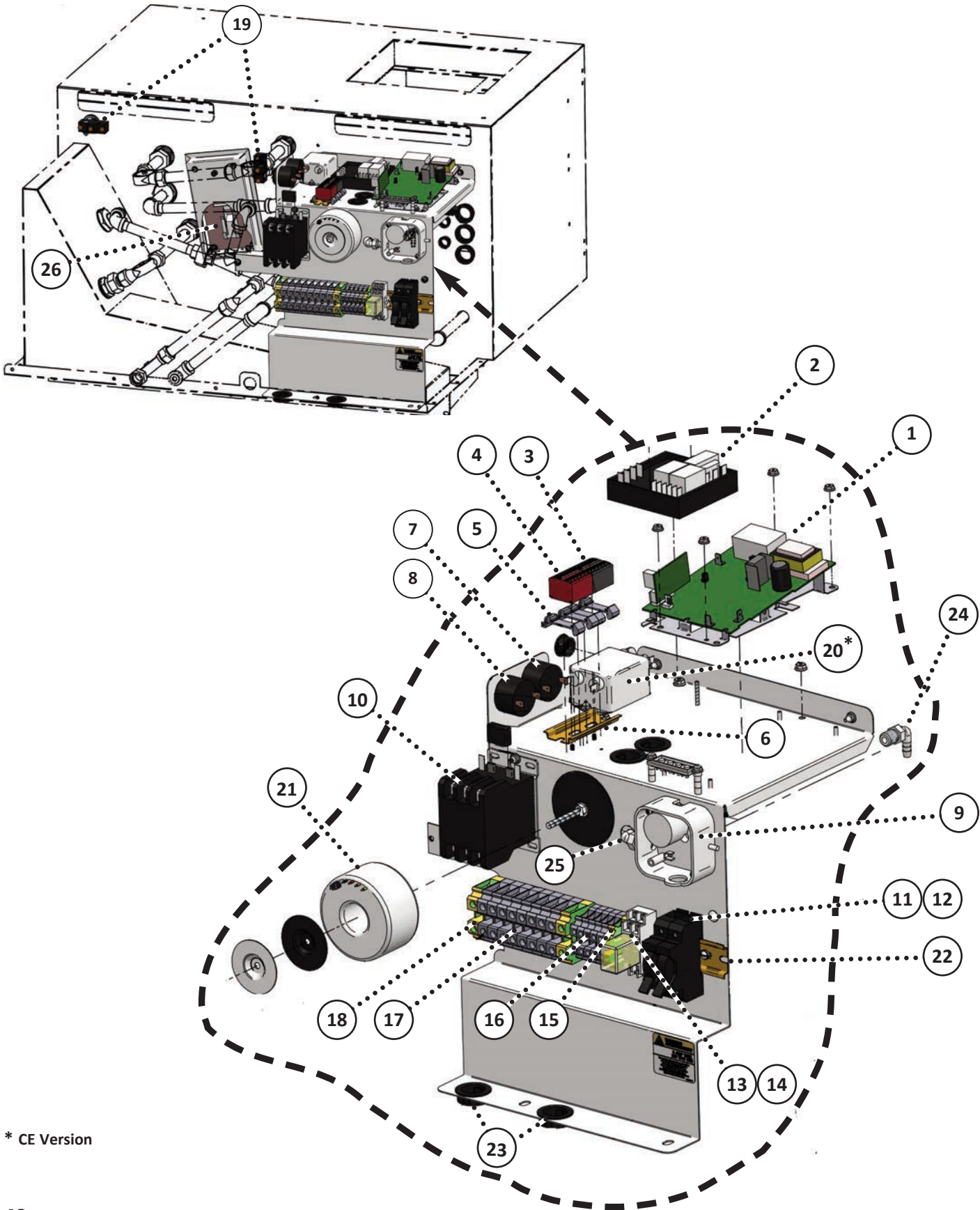
Our goal at Giles is to provide the highest possible quality of service and assistance. To help us accomplish this, please have the following information readily available when calling, along with a brief description of the problem being experienced. Please record the unit information in the table below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

Model:	
Serial Number:	
Voltage:	
Phase:	

MODEL/MODELE:		SERIAL NO./NO. DE SERIE:		
GEF-720		70848 011713 05		
VAC/VCA:	HZ:	PHASE:	AMPS:	WATTS:
208	60	3	58	20000
DESCRIPTION/DESCRIPCIÓN:				
FRYER, GEF-720, COMP, 208/60/3				
 				
GILES ENTERPRISES				
1-800-554-4537				
2750 GUNTER PARK DRIVE WEST • MONTGOMERY • ALABAMA • 36109				

The information can be found on the Serial/Data Label (similar to this) located on the Hood side.

7.02 Rear Electrical Components



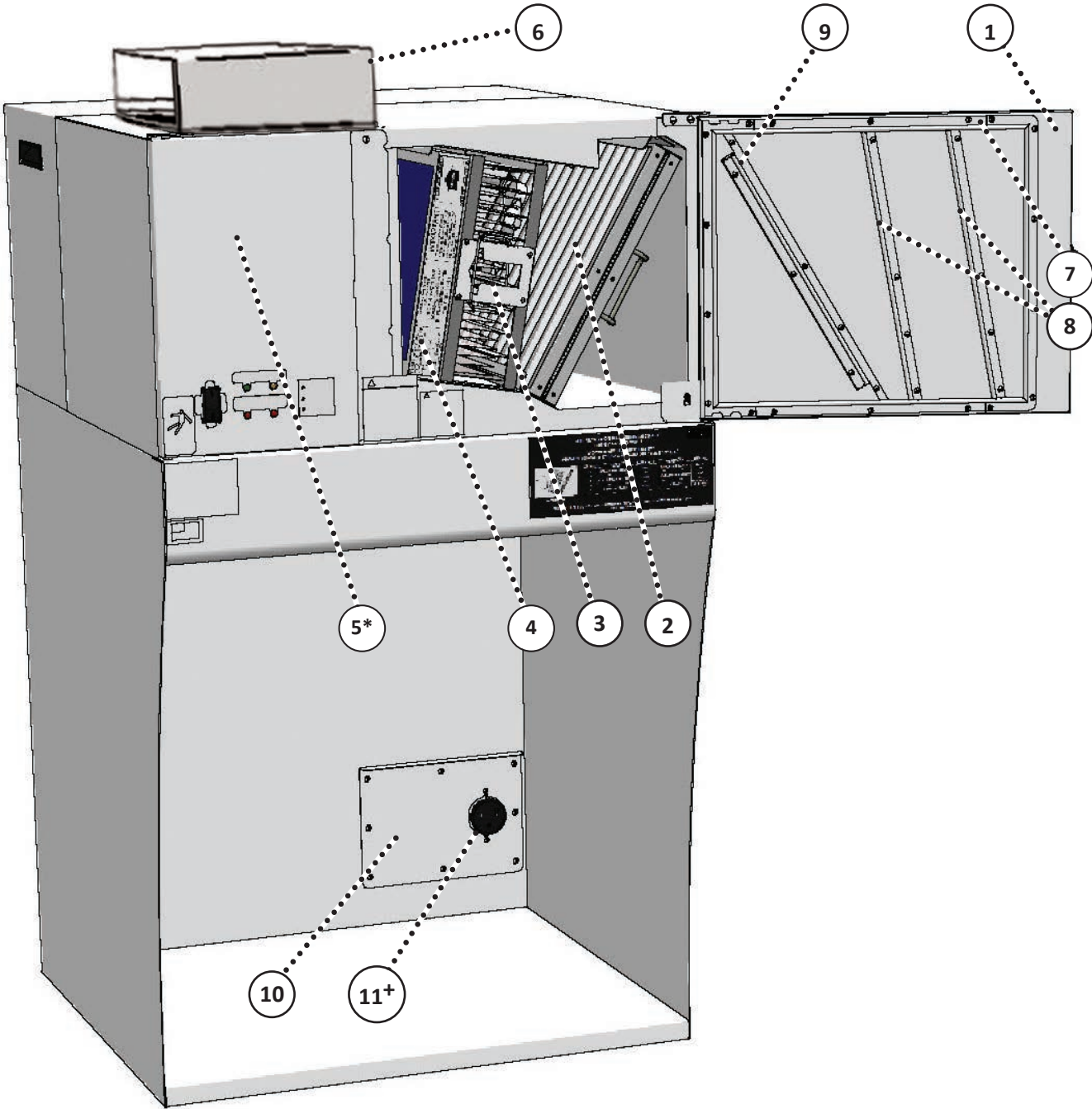
* CE Version

7.02 Parts List for Rear Electrical Components

Item	Part No.	Qty.	Description
1	21296	1	EAC POWER PACK/DRIVER BRD, 120V
2	23776	1	ALARM & SHUTDOWN MODULE, AIR FILTER
3	21510	1	DIST.BLOCK, 12-PL, 12-26 AWG, BLACK
4	21509	1	DIST.BLOCK, 12-PL, 12-26 AWG, RED
5	21496	4	END BRACKET CLIP, DIN RAIL, PTFIX, NS-35
6	94784	1	RAIL, DIN, 3-IN
7	23782	1	SONALERT, CONTINUOUS TONE, 250V
8	22950	1	SONALERT, 250V, INTERMITTENT
9	20473	1	SWITCH, VACUUM, DUNGS, 0.4 > 4.0 WC
10	21151	1	CONTACTOR, 63-AMP, 3PH, 208/240V
11	20411	2	FUSE HOLDER, DIN RAIL, 600V, 35A
12	21875	2	FUSE, 6-AMP, SC-6
13	20312	1	BASE, RELAY, PLUG-IN, DIN MOUNT
14	20318	1	RELAY, 240 VAC, 10A, ELECTRO-MECH
15	20320	1	TERMINAL BLOCK, GROUND, AWG 8-24
16	20319	5	TERMINAL BLOCK, 50 AMP, AWG 8-24
17	20303	8 / 6*	TERMINAL BLOCK, 4-12 GA WIRE
18	20304	2	TERMINAL BLOCK, GROUND, 4-12 GA WIRE
19	24237	2	SWITCH, PLUNGER, 250V, 15A
20*	20397	1	LINE FILTER, INCOMING POWER, 10A
21	21337	1	TRANSFORMER, 230VAC >115VAC @.86A <i>(Includes mounting hardware)</i>
22	93134	1	DIN RAIL, 11.0"
23	40550	4	PLASTIC BUSHING, 1-1/4"
24	40880	1	NYLON FITTING, 90-EL, 1/4" BARB, 1/4-NPT
25	40877	1	NYLON FITTING, 90-EL, 1/4" BARB, 1/8-NPT
26	21125	1	E.A.C. CONTACT BOARD

* CE Version

7.03 Hood Front / Filter Compartment



* Hidden
+ Optional

Parts List

Model: GVH-C & -F

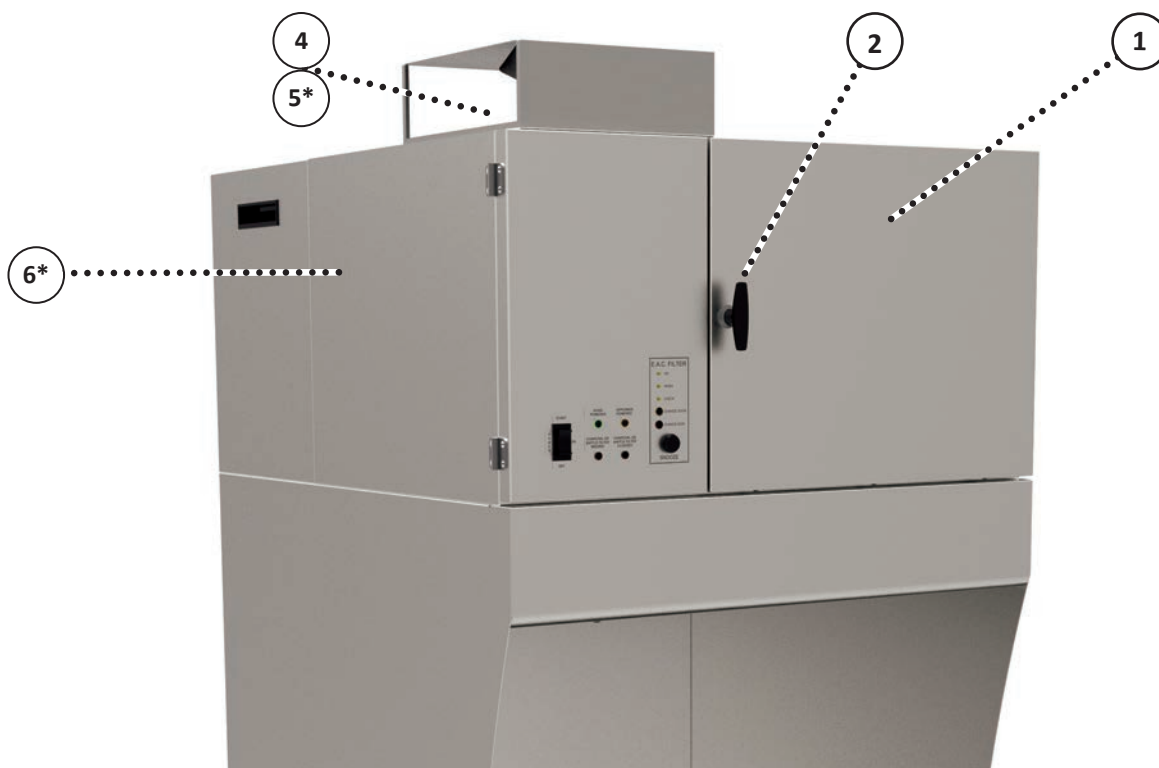
7.03 Parts List for Hood Front / Filter Compartment

Item	Part No.	Qty.	Description
1	95703	1	FILTER ACCESS DOOR ASSEMBLY (COMPLETE)
2	41043	1	FILTER, BAFFLE, GILES, DOUBLE, 16HX20W
3	93302	1	FILTER, EAC ASSY, 20-IN, HANDLE & PLATE
4	30248	1	CHARCOAL FILTER, ASSY, 20 X 12-3/8
5*	93296	1	BLOWER ASSEMBLY, GVH HOOD
6	94322	1	AIR DIVERTER
7	41122	1	OUTER DOOR GASKET
8	41116	2	GASKET, EAC & CHARCOAL FILTER
9	41116	1	GASKET, BAFFLE FILTER
10	93295	1	PLATE, BLANK, NO RECEPTACLE (STANDARD)
10 ⁺	93173	1	PLATE, SINGLE RECEPTACLE, 3-PH, 50A (OPTIONAL)
10 ⁺	93996	1	PLATE, SINGLE RECEPTACLE, 1-PH, 50A (OPTIONAL)
11 ⁺	20370	1	RECEPTACLE, 50A, 3PH, 4-WIRE (OPTIONAL)
11 ⁺	22775	1	RECEPTACLE, 50A, 250V, 2-PL, 3-WR, 1PH, STR (OPTIONAL)

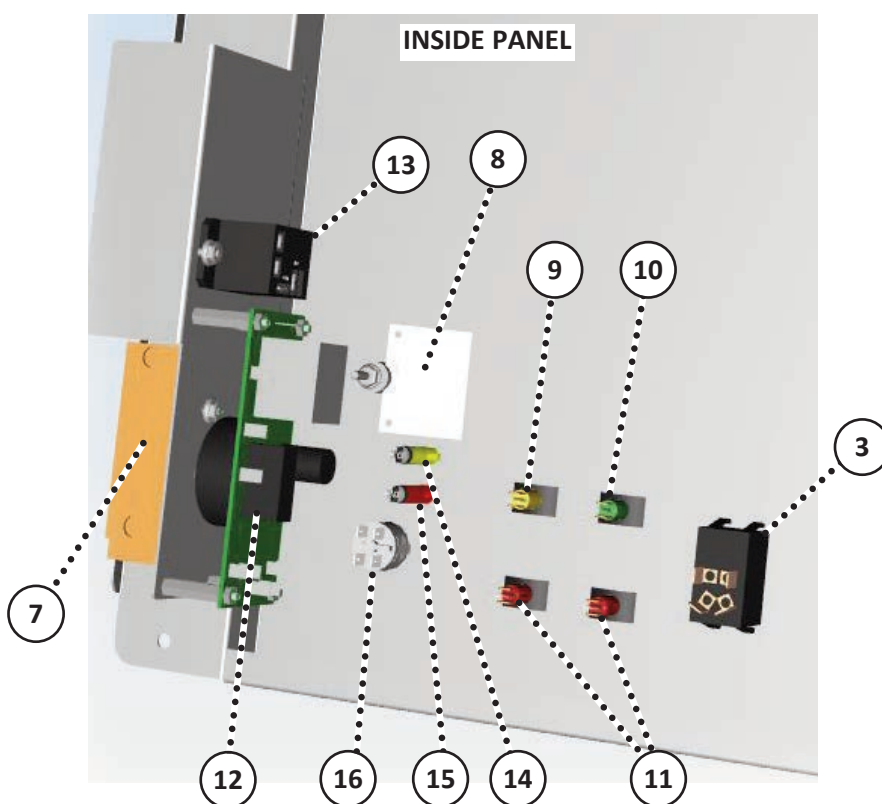
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+ Optional

7.04 Hood Front / Control Panel



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Parts List

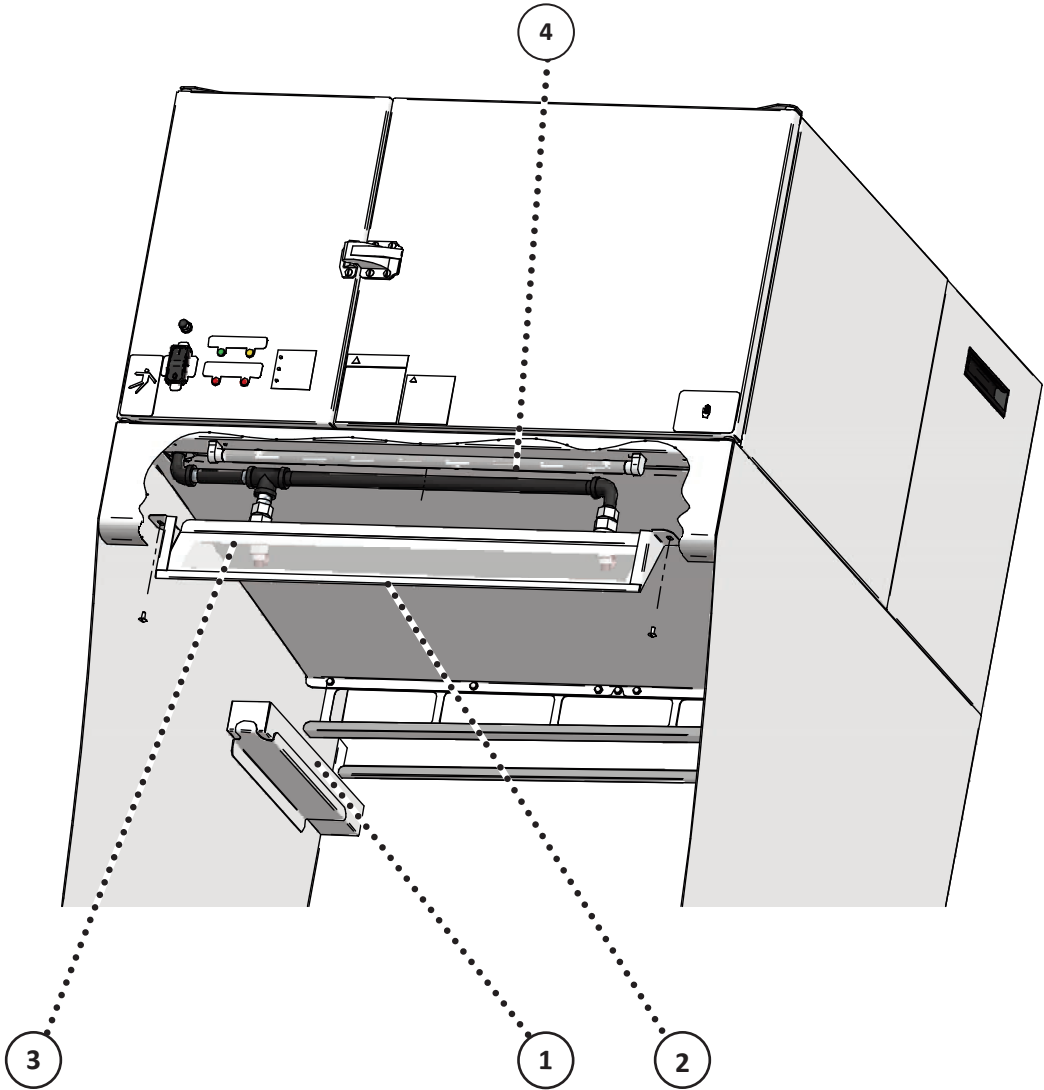
Model: GVH-C & -F

7.04 Parts List for Hood Front / Control Panel

Item	Part No.	Qty.	Description
1	95703	1	FILTER ACCESS DOOR ASSEMBLY (COMPLETE)
2	41257	1	LATCH, COMPRESSION (INCLUDED WITH DOOR)
3	21441	1	SWITCH, ROCKER, (ON)-ON-OFF, 250V, 20A
4	94322	1	AIR DIVERTER
5*	41115	1	DAMPER, FIRE, 10 X 10, SHALLOW
6*	93296	1	BLOWER ASSEMBLY, GVH HOOD
7	21157	1	SWITCH, LIMIT, 15A, 250V
8	24209	1	L.E.D. CLUSTER, EAC FILTER
9	20399	1	INDICATOR LIGHT, AMBER, 250V, 0.5W
10	20398	1	INDICATOR LIGHT, GREEN, 250V, 0.5W
11	20402	2	INDICATOR LIGHT, RED, 250V, 0.5W
12	20572-R	1	EAC CLEANING TIMER BOARD, REPLACEMENT
13	21203	1	RELAY, -NO, 240V
14	20694	1	PILOT LIGHT, YELLOW, EAC CLEANING TIMER
15	20693	1	PILOT LIGHT, RED, EAC CLEANING TIMER
16	20692	1	SWITCH, MOMENTARY PUSH-BUTTON, EAC CLEANING TIMER

* Hidden

7.05 Under-Hood Components



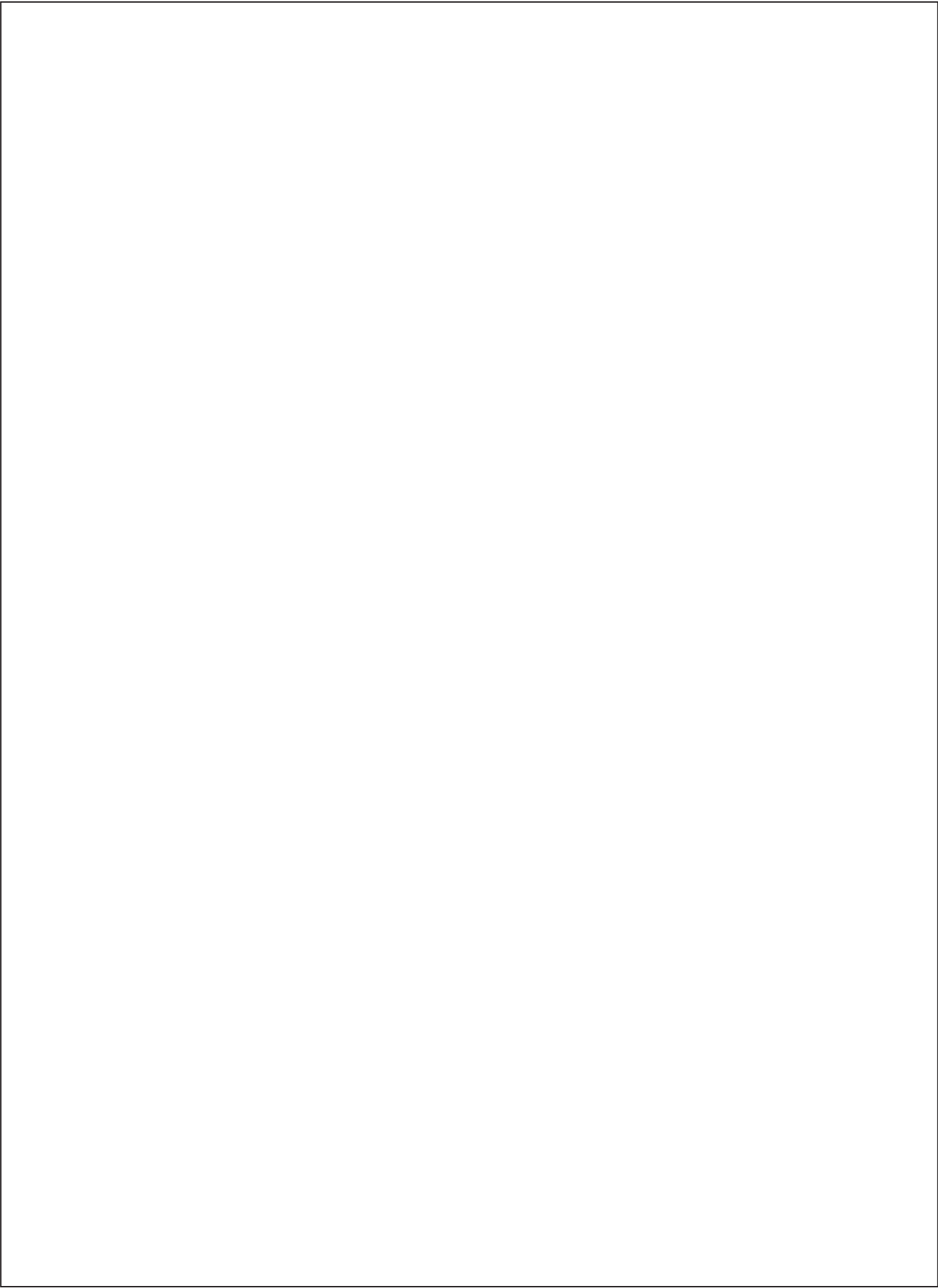
Parts List

Model: GVH-C & -F

7.05 *Parts List for Under-Hood Components*

Item	Part No.	Qty.	Description
1	93131	1	GREASE DRIP CUP
2	93987	1	LIGHT COVER FRAME
3	41113	1	GLASS, LIGHT COVER
4	20616	1	BULB, FLUORESCENT ,T5, 14W, 22" COOL







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