

Operations & Service Manual

GBF-35D-VH
GBF-50D-VH

Ventless Operation Supplement GBF-D-VH



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1. Installation

This section provides a summary of the procedures necessary for proper installation of your Giles equipment, Model GBF-50D-VH, GBF-35D-VH. To prevent possible personal injury or damage to equipment, please ensure the following steps are taken.

1.1 Location

Note:

- Consider that, when operating, the decibel level of the hood unit is approximately 65 dB's.

1. Depending on local code, room size and other appliances in use, exhaust ventilation may be required for the space in which this unit is to be located. This often can be accomplished by installation of an exhaust fan. To determine the requirement for a specific installation, provide an HVAC contactor or specialist the following information:
 - a. The recirculating hood exhausts between 510 to 680 cfm.
 - b. The average temperature of the air being exhausted from the hood is approximately 90°F (32°C), after four (4) hours of continuous cooking operations.
2. This appliance is to be installed, used and maintained in accordance with the Standard for Ventilation Control, and Fire Protection of Commercial Cooking Operations, NFPA 96-1994.

The above steps will help ensure safe and proper installation. If there are questions concerning these procedures, contact the nearest Giles Representative or other qualified service agency.

1.2 Ventless Hood Clearances

The GBF Ventless Hood Fryer series is equipped with a directional exhaust air discharge diverter which directs air horizontally to the sides and rear. For that reason, zero (0") clearance is required from the top of the exhaust diverter to the ceiling.

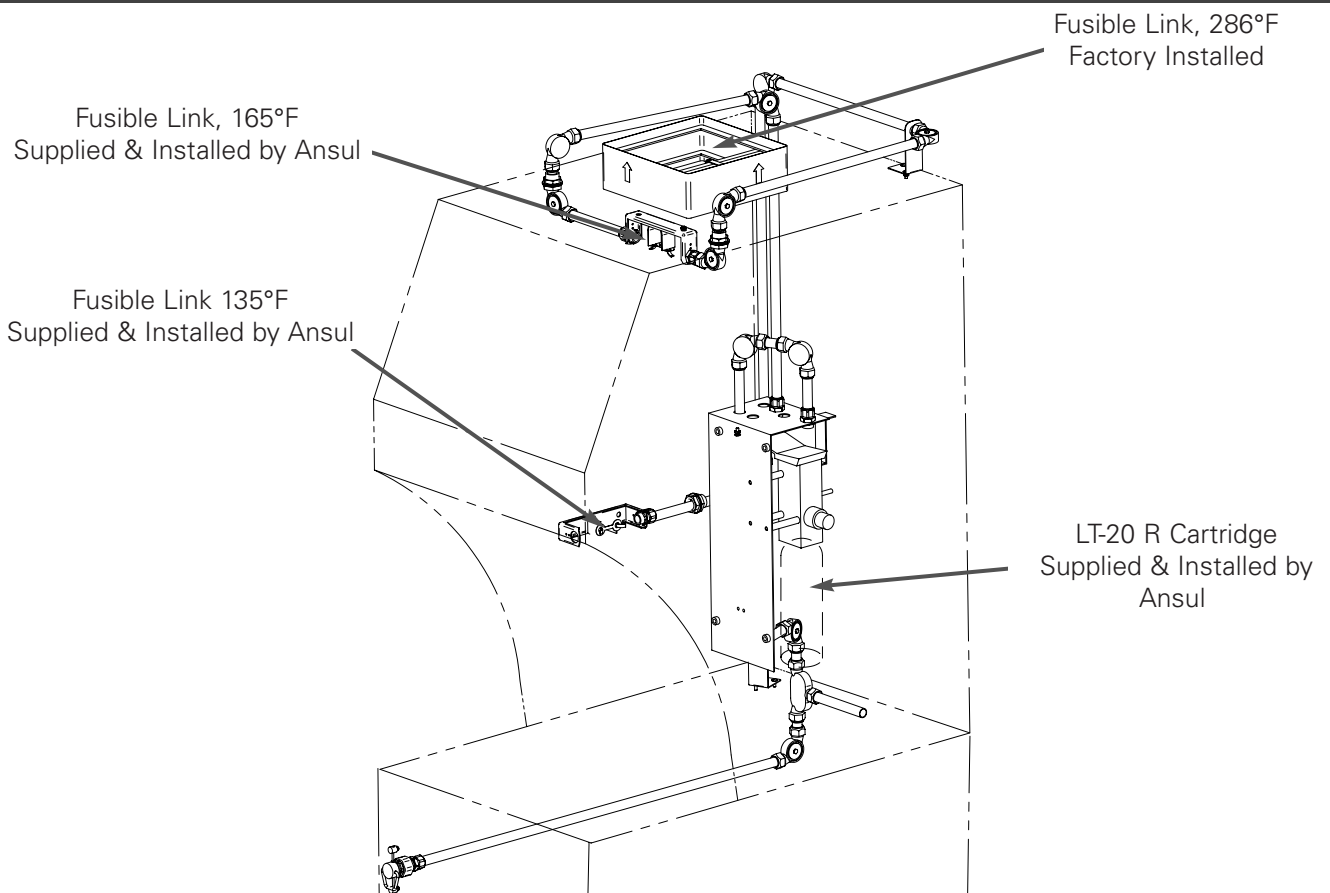
A clearance of 3" to 6" (76 to 152 cm) is recommended to allow for floor irregularities and to provide ample head space for moving or repositioning the appliance.

1.3 Ventless Hood Fire Suppression System

The fire suppression system used in the Giles Ventless Hood Fryer is an Ansul R-102 Restaurant Fire Suppression System (Standard UL 197 Listed). The system consist of piping, discharge nozzles (appliance & plenum), conduit for fusible link cabling, release mechanism and empty chemical suppressant tank. **Final installation, charging and testing of the system must be performed by an authorized Ansul distributor in accordance with the system's listing ... cost of this work is the sole responsibility of the purchaser.**

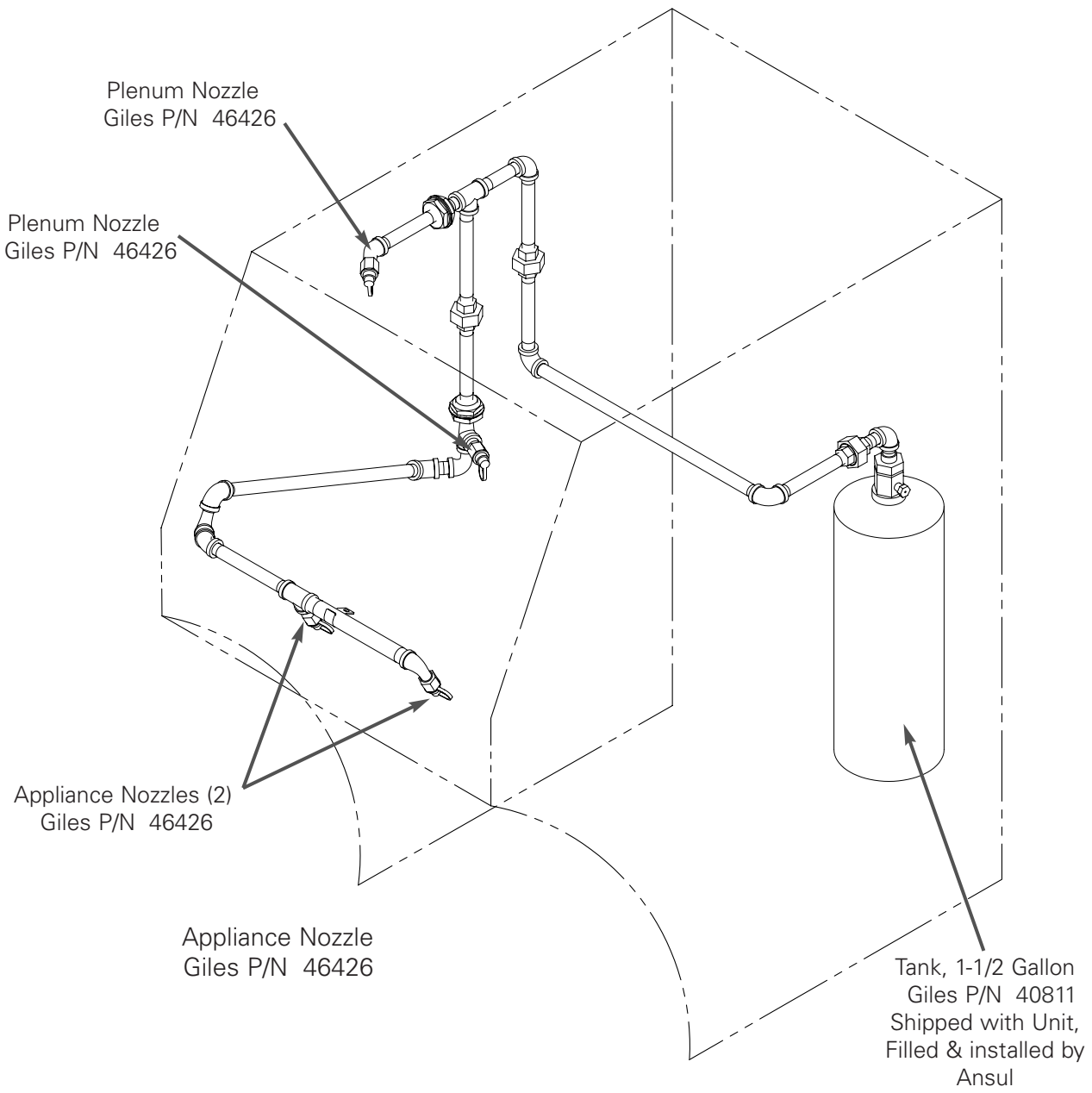
The fire suppression system is UL listed to automatically provide fire protection for cooking appliances, such as fryers, 24 hours per day.

1.4 Fusible Link & Gas Cartridge Locations



1.5 Fire Extinguisher Nozzle & Tank Locations

All of the discharge nozzles have been factory installed and aligned in the proper operating position. **DO NOT MOVE OR ADJUST.**

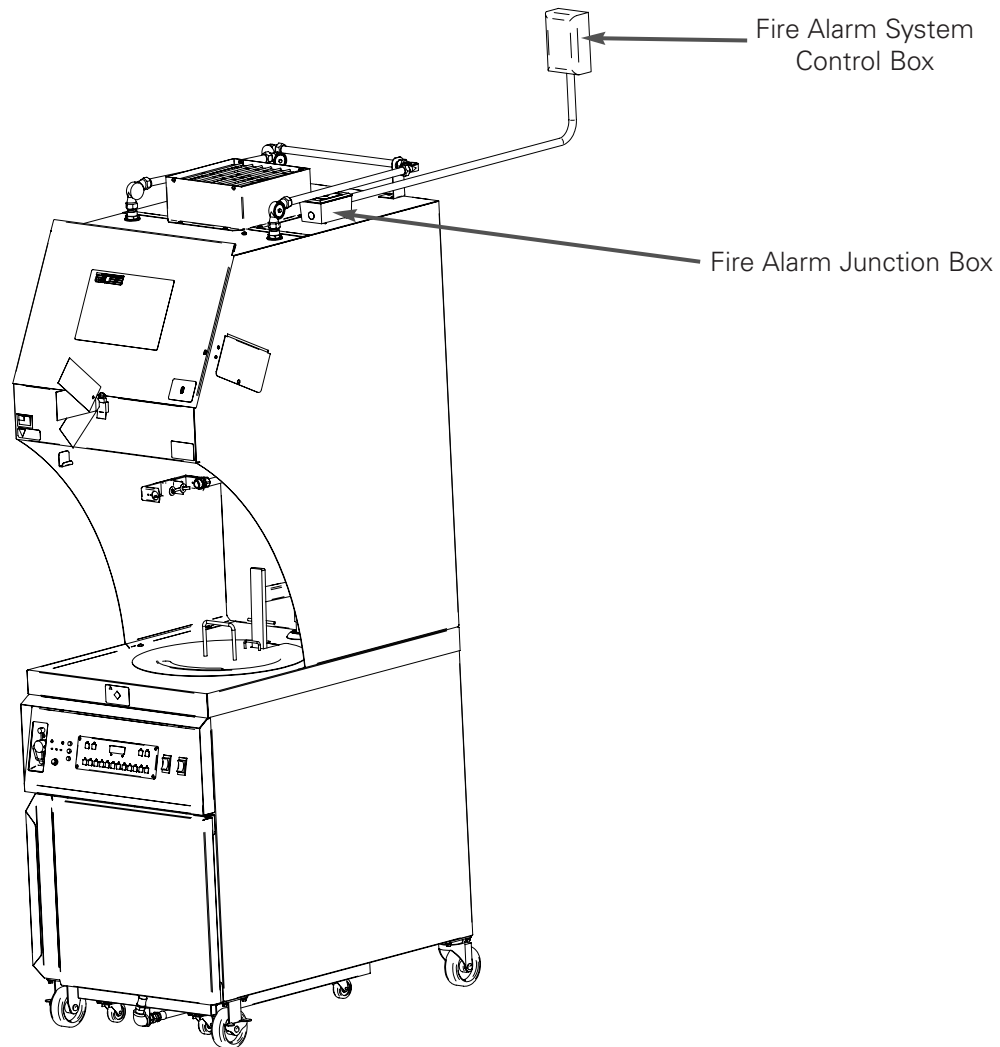


1.6 Fire Alarm Connection

This connection ties the Fire Suppression System's release mechanism into a facility fire alarm system, allowing a signal to be sent to the alarm should the Hood Fire Extinguisher System be activated.

Fire Alarm Connection:

1. Remove Cover from Fire Alarm Junction Box atop Hood. Route appropriate size conduit and wire from the Box to the facility's alarm system control box. Allow enough conduit slack so the Hood can be accessed for cleaning and servicing.
2. Make appropriate connections and reinstall junction box cover.



2. Ventless Hood

This section applies to the Ventless Hood (VH) models only. It describes the operation and maintenance of the Ventless Hood and the Filters contained in the hood.

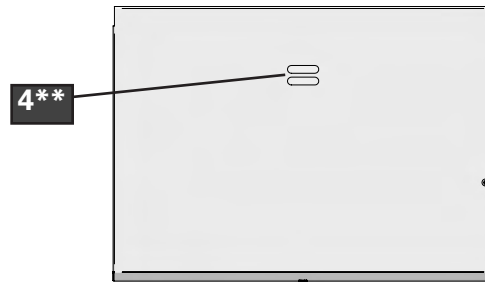
2.1 Hood Operation

This section describes how to start the Ventless Hood. Make use all the Filters are in place before operating the unit.

1. Place the Power Switch in the ON **1** position, (if ILS, press and hold the **Push and Hold to Start*** button for 5 seconds) the Power Light **2** and EAC **ON** indicator light **3** will come on.

If equipped with UV option, the Sight Window **4**** will illuminate.

This will turn the unit on and the ventless hood fan will begin running.



* Not Shown
** UV Only

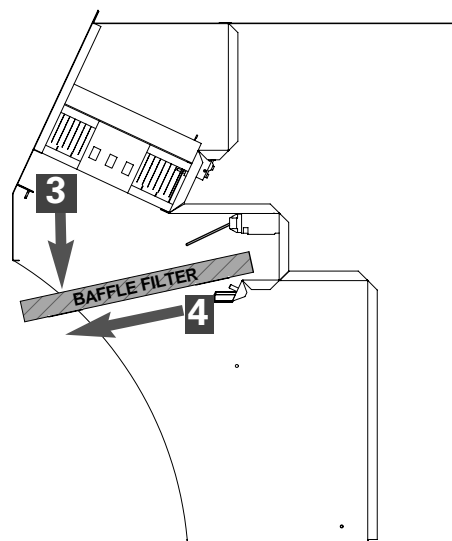
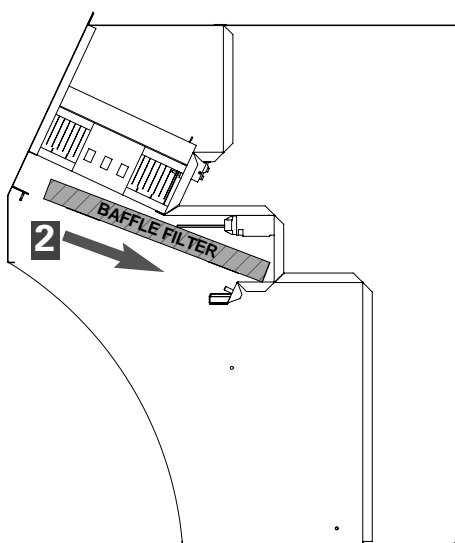
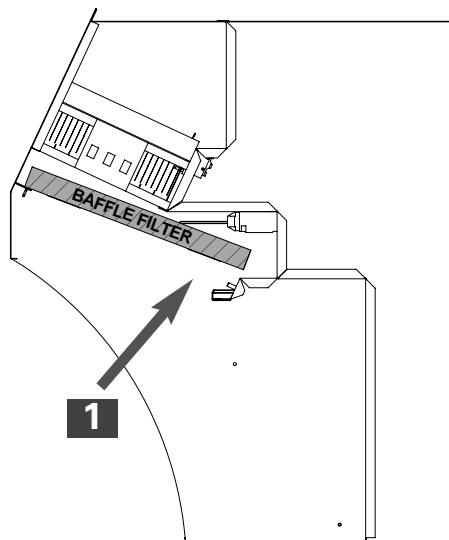
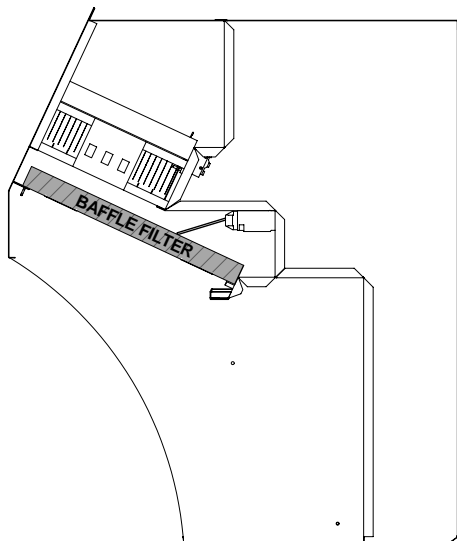
2.2 Filters

This section describes each Filter in the Ventless Hood.

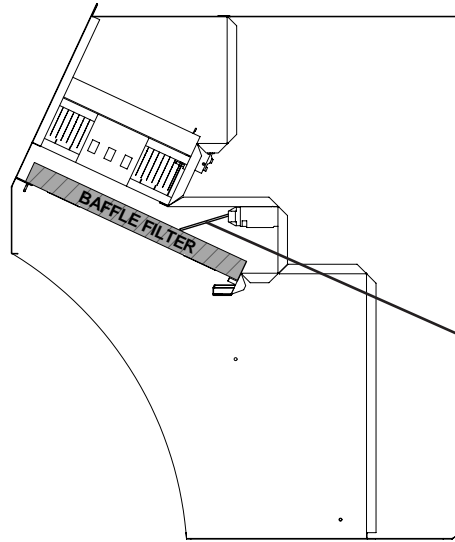
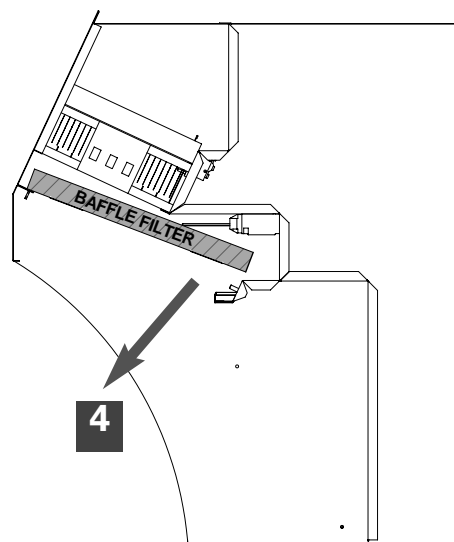
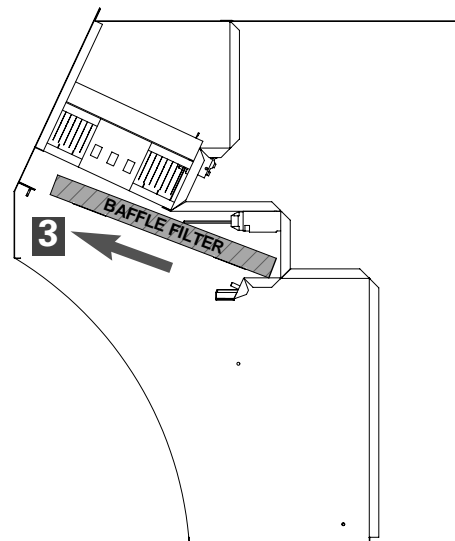
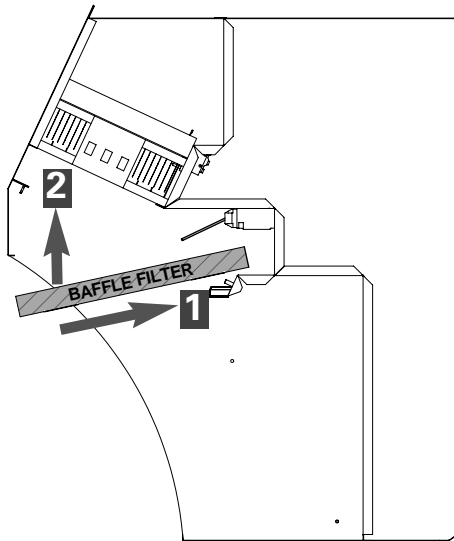
2.2.1 Ventless Hood Filter Table

Filter	When to clean or replace	How to remove	How to clean	How to install
Baffle Filter	Clean Daily	Section 7-2.02	Section 7-02.05	Section 7-02.03
EAC Filter	Clean Daily	Section 7-02.06	Section 7-02.09	Section 7-02.07
Charcoal Filter	Replace every 30 days, P/N 30248	Section 7-02.10	Never clean, only replace	Section 7-02.11
Ultra Violet Lamp	Clean every 30 days Replace annually	Section 7-02.15	Section 7-02.14	Section 7-02.16

2.2.2 Baffle Filter Removal



2.2.3 Baffle Filter Installation



Switch arm must be actuated by the Baffle Filter as shown

2.2.4 Baffle Filter Missing

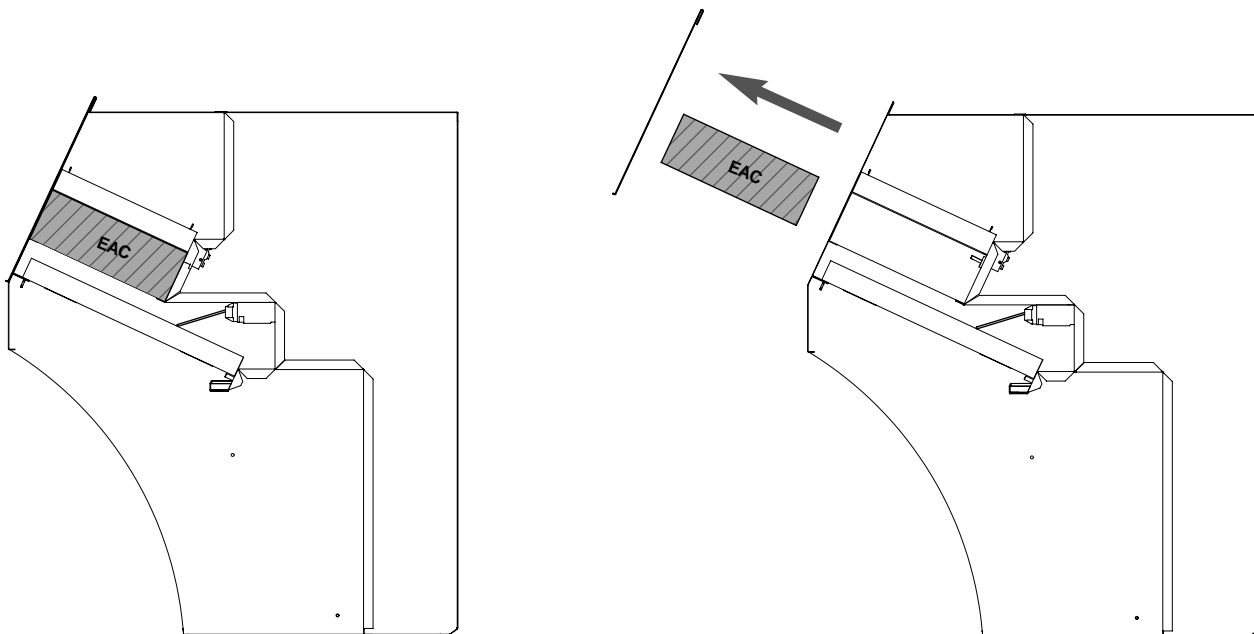
If the Baffle Filter is missing or not positioned correctly the Filter Missing Light **1** will come on. See **Section 2.2.3, Baffle Filter Installation.**



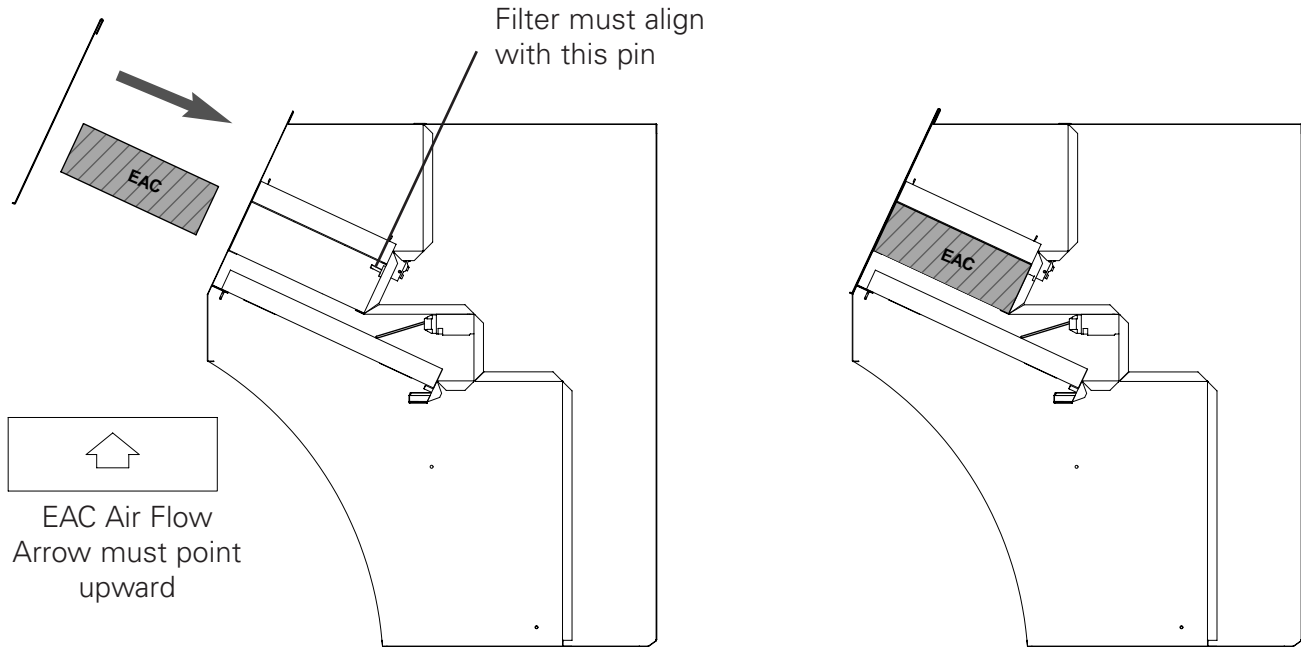
2.2.5 Baffle Filter Cleaning

The Baffle Filter should be cleaned daily. Place the Baffle Filter in a sink and clean with a mild degreaser. Dry thoroughly, then reinstall in the unit. **Never place wet filter into unit!**

2.2.6 EAC Filter Removal



2.2.7 EAC Filter Installation



2.2.8 EAC Filter Status

The three indicator lights on the Control Panel display the status of the EAC Filter.

- 1 ON** The EAC Filter is in place, powered and operating normally.
- 2 WASH** The EAC Filter has become excessively dirty and must be cleaned. If this light is on for more than 2 minutes, an intermittent alarm will sound and Fryer heating elements will be shutdown until the condition is remedied.
- 3 CHECK** The EAC Filter has stopped operating, it is either not getting a proper electrical supply or it has been damaged. If this light is on for more than 2 minutes an intermittent alarm will sound and Fryer heating elements will be shutdown until the condition is remedied.

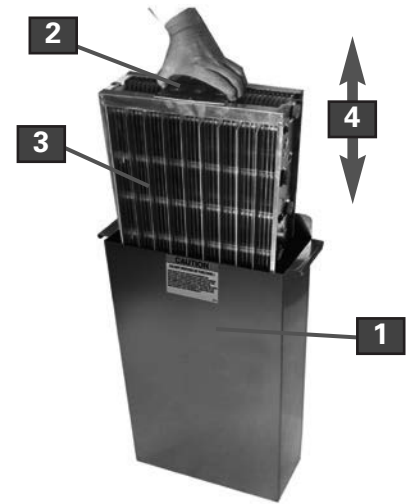


2.2.9 EAC Filter Cleaning

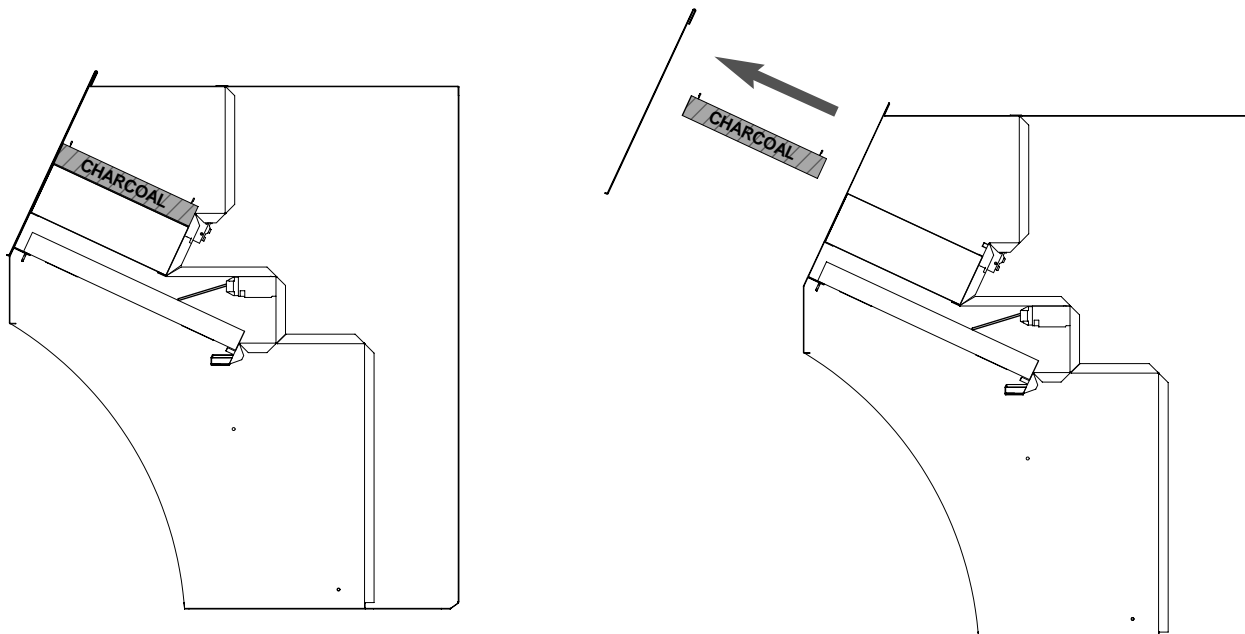
To ensure proper operation, the EAC Filter must be cleaned daily.

Be careful not to bend the collection fins or break the ionizer wires on the EAC cell as this will prevent the filter from working properly and will cause power to the fryer heating elements to be shutdown.

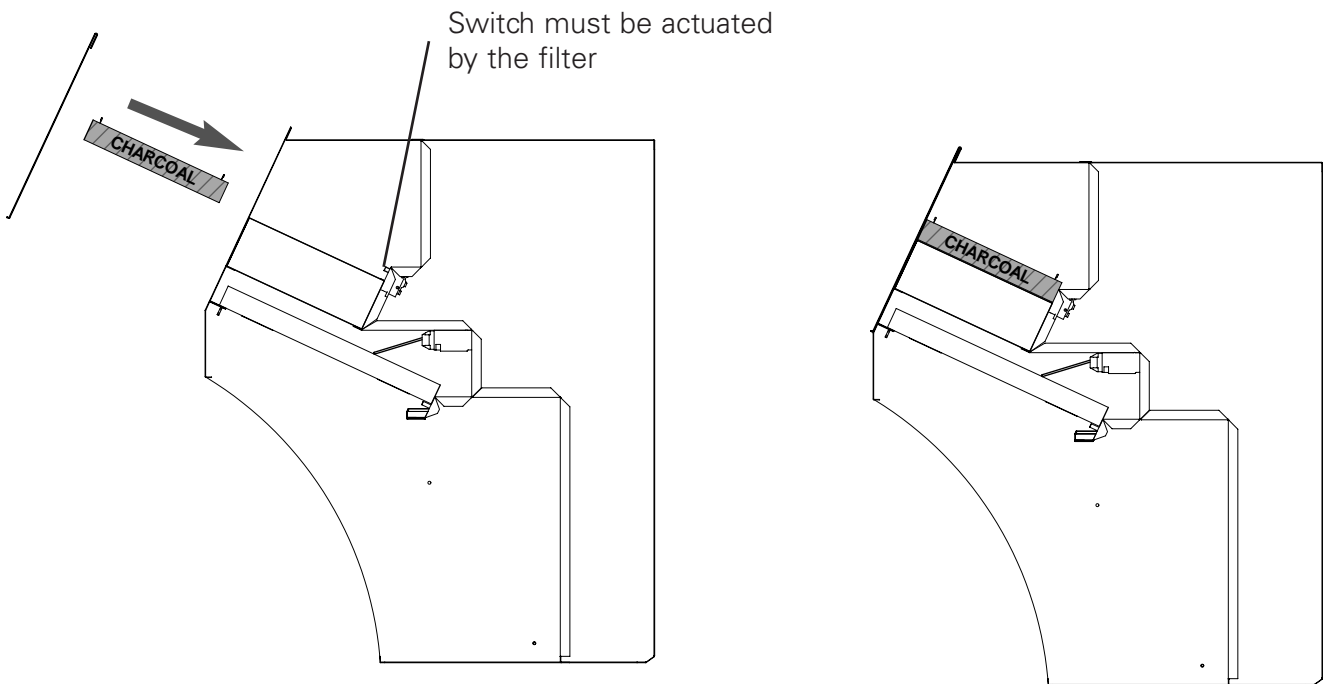
1. Add approx. 1/2 gal of a mild degreaser, such as **Simple Green** or **Clean Magic**, to the included Soak Tank **1**. Fill with cold water, to the full line marked by X's on inside of tank back, and mix.
2. Holding the contact plate **2** of the EAC **3**, slowly lower the filter into the Soak Tank solution.
3. After allowing the EAC to soak at least 30 minutes, grasp the contact plate and jog the cell up and down **4** approximately 1" to 2" to help remove the grease residue.
4. Slowly remove the EAC from the tank and rinse clean in a sink using hot water spray.
5. Allow the EAC to thoroughly dry.



2.2.10 Charcoal Filter Removal



2.2.11 Charcoal Filter Installation



2.2.12 Charcoal Filter Missing

If the Charcoal Filter is missing or not positioned correctly and the unit is on, the Filter Missing Light **1** will turn on. See Section 2.2.11, Charcoal Filter Installation.



7.2.13 Charcoal Filter Replacement

Never attempt to clean the Charcoal Filter. Doing so could cause damage to the unit.

Replace the Charcoal Filter every 30 days to maintain proper operation.
Use Replacement Part No. 30248.

2.2.14 Ultra Violet Lamp Cleaning (if equipped)

CAUTION

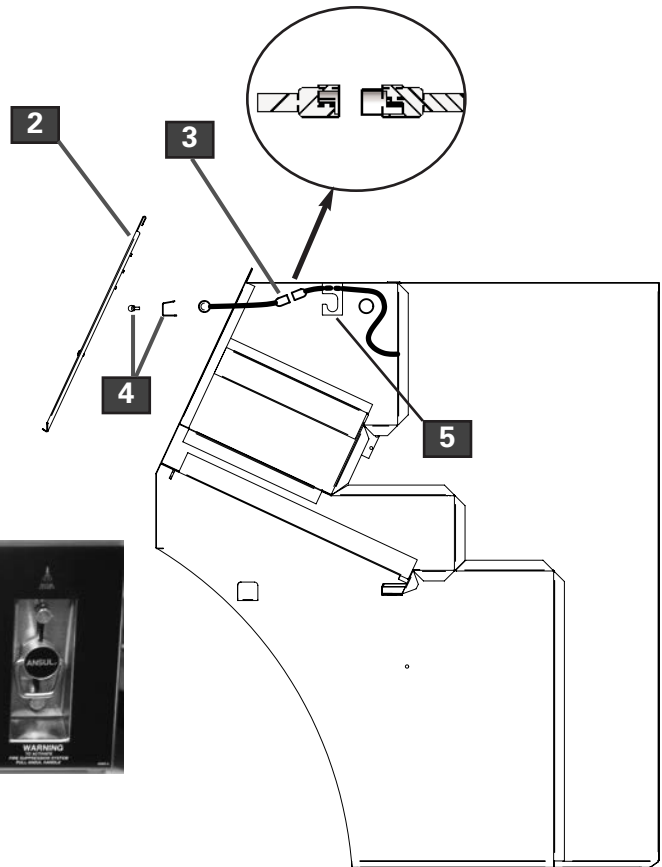
- **DO NOT** touch or handle UV Lamp with bare hands. Doing so will greatly reduce the life of bulb.

Clean UV Lamp at least every 30 days ...

1. Place Fryer power switch in **OFF** position.
2. Remove Filter Access Cover
3. Remove thumb screws and Lamp Guard. There is no need to remove the lamp.
4. Lightly spray a mild, non-caustic, biodegradable degreaser (such as Simple Green) onto the UV lamp and use a dry, lint-free cloth to clean bulb. **Avoid touching bulb with bare hands.**
5. Re-install Lamp Guard and Filter Access Cover.

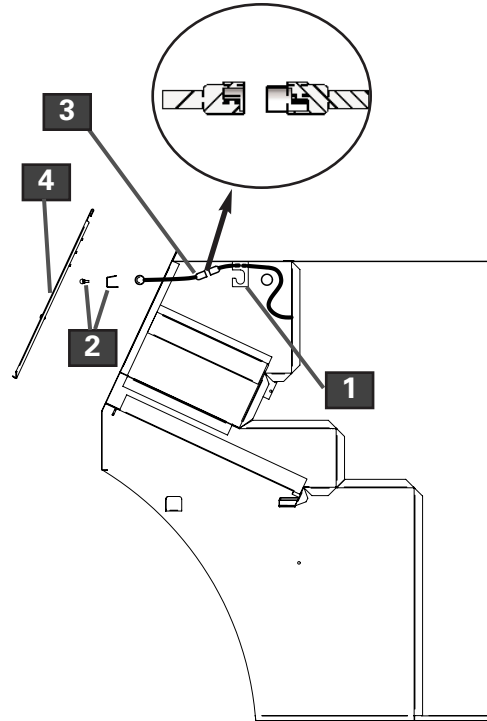
2.2.15 Ultra Violet Lamp Removal (if equipped)

1. Place Fryer power switch **1** in the **OFF** position.
2. Remove Filter Access Cover **2**.
3. Disconnect UV Lamp wiring harness from power supply wiring harness **3**.
4. Remove thumb screws and UV Lamp Guard **4**.
5. Remove Lamp from Holding Brackets **5**.



2.2.16 Ultra Violet Lamp Installation

1. Install new UV lamp in holding brackets **1**.
2. Install Lamp Guard and tighten thumb screws **2**.
3. Connect UV Lamp wiring harness to power supply wiring harness **3**.
4. Install all filters and Access Cover **4**.
5. Place Fryer power switch in the **ON** position.



2.2.17 Hood Filter Alarm Chart

Alarm Sound	What will happen	Filter Affected	Cause	Solution	Reference
Continuous tone	Alarm will sound and power to the Fryer heating elements will shut off. (If ILS Model , power to the Fryer and the Hood section will shut off)	Charcoal	Filter dirty	Replace Filter	Sections 2.2.10 & 2.2.11
Continuous tone	Alarm will sound and power to the Fryer heating elements will shut off. (If ILS Model , power to the Fryer and Hood section will shut off)	Baffle	Filter dirty	Clean Filter	Sections 2.2.2 & 7.2.3
Intermittent tone	Alarm will sound for two (2) minutes, then power to the Fryer heating elements will shut off. (If ILS Model , power to the Fryer and Hood section will shut off)	E.A.C.	Filter dirty	Clean Filter	Sections 2.2.6, 2.2.7, 2.2.8 & 2.2.9

2.3 Maintenance

This Section describes Ventless Hood (VH) System periodic maintenance procedures that will help maintain its efficiency over time.

A **Maintenance and Service Log** is provided in this manual, see **Table 2.3.6**.

2.3.1 Monthly Interlock Check

The Giles Ventless Hood System is equipped with various interlocks that prevent use of the fryer in the event that conditions for safe and effective operation are not present. Testing of the interlock system should be conducted **MONTHLY** to ensure that it remains working properly. Check-off Service Log for tests performed. If a problem is found call a Giles Service Agent or Technical Support at **800.554.4537**.

1. **Baffle Filter Check:** Power Switch in the **OFF** position ... remove the grease baffle filter. Place Power Switch in the **ON** position ... place the Selector Switch in the **COOK** position. The heat light should not come on. Return power switch and selector switch to **OFF** and reinstall the grease baffle filter in the hood.
2. **EAC Filter Check:** Remove the EAC cell. Place Power Switch in the **ON** position ... place the Selector Switch in the **OFF** (centered) position. After approx. two (2) minutes and when alarm tone silences, place Selector Switch to the **COOK** position. The heat light should not come on. Return power switch and selector switch to **OFF** and reinstall the EAC cell.
3. **Charcoal Filter Check:** Remove the Charcoal Filter. Place Power Switch in the **ON** position ... place the Selector Switch in the **COOK** position. The heat light should not come on. Return power switch and selector switch to **OFF**. Reinstall the charcoal filter.
4. **Filter Clogged Check:** **Perform this test ONLY when oil is in the fry pot.** Place the Power Switch in the **ON** position and the Selector Switch in the **COOK** position. Place a piece of material, such as cardboard, which is large enough to block the Baffle Filter over it. Within a few seconds an alarm tone should sound and the heat light will turn off. Return all switches to their **OFF** positions and discard the test blockage material.

2.3.2 Quarterly Hood Cleaning

Remove power from the unit at the wall breaker. Remove all Filters from the hood. Used a mild degreaser to clean the entire hood plenum and blower sections. Be certain to clean the fan blades if there is evidence of grease build-up. The hood should section should be cleaned at least every 3 months to help maintain performance, effectiveness and safety..

2.3.3 Semi-Annual Fire Suppression System

Service of the fire suppression system is to be conducted by certified fire protection equipment specialists. At a minimum, field inspection of the Fire Suppression System must be performed semi-annually by a qualified fire protection equipment service agent. This semi-annual inspection and service shall consist of the following.

Place fire extinguishing system locking bar on fire system when servicing hood.

1. Remove charging cartridge, inspect gasket for cuts and elasticity, coat gasket with high-temperature grease ... reinstall cartridge.
2. Verify suppressant chemical is at proper level in tank ... clean o-ring and coat with high-temperature grease and reinstall.
3. Check and clean all discharge nozzles of any grease buildup ... verify nozzle protective covers are in good condition.
4. Test the remote manual pull station for activation and wear.
5. Install test link and conduct simulated automatic actuation test.
6. Clean and inspect fusible links.
7. Inspect fusible link cabling for wear at pulleys and detectors ... replace if necessary.
8. Record date of inspection and service ... maintain in a permanent file.

2.3.4 Annual Fire Suppression System

This is the same inspection and service as the semi-annual check, except that all fusible links must be replaced with new links.

2.3.5 12 Year Fire Suppression System

Same as annual service except for the following:

1. Replace R-102 fire suppressant chemical.
2. Hydrostatically test the storage tank and discharge cartridge (replace with new parts that carry current certifications).
3. Perform flow test on the system regulator.

2.3.6 Maintenance & Service Log

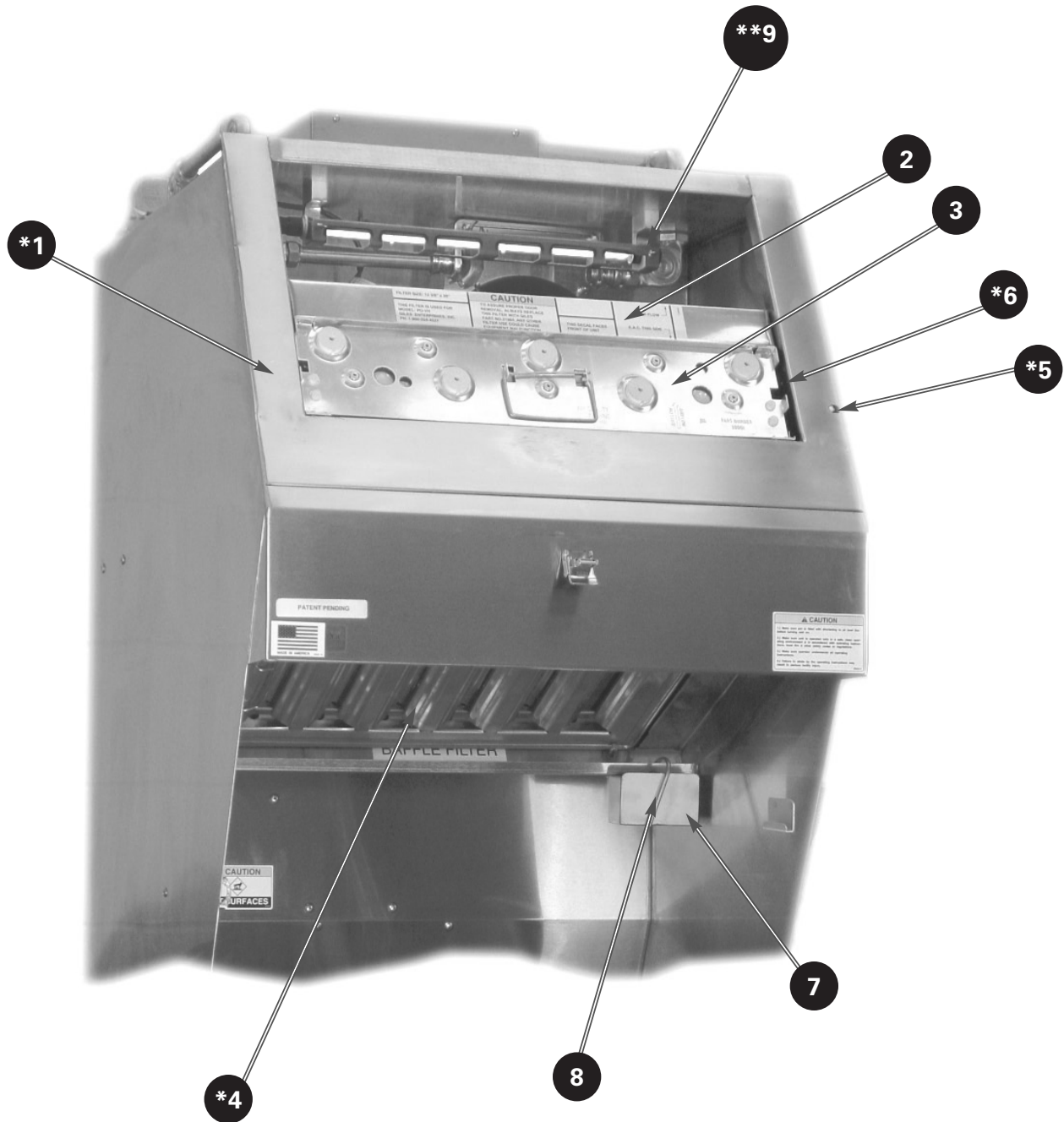
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- | | | | | | |
|---|---|---|--------------------|---|--|
| 1 | Baffle Filter Check | 2 | EAC Filter Check | 3 | Charcoal Filter Check |
| 4 | Filter Clogged | 5 | Quarterly Cleaning | 6 | Fire Suppression System |
| 7 | Fire Suppression System replace Fusible Links | | | 8 | Replace UV Lamp
<i>(UV Option Only)</i> |

* Inspection performed by a qualified fire equipment company.



3.1 Front Ventless Hood



* Not shown

** UV Only

Parts List

Model: GBF-35D-VH, GBF-50D-VH



3.1 Front Ventless Hood

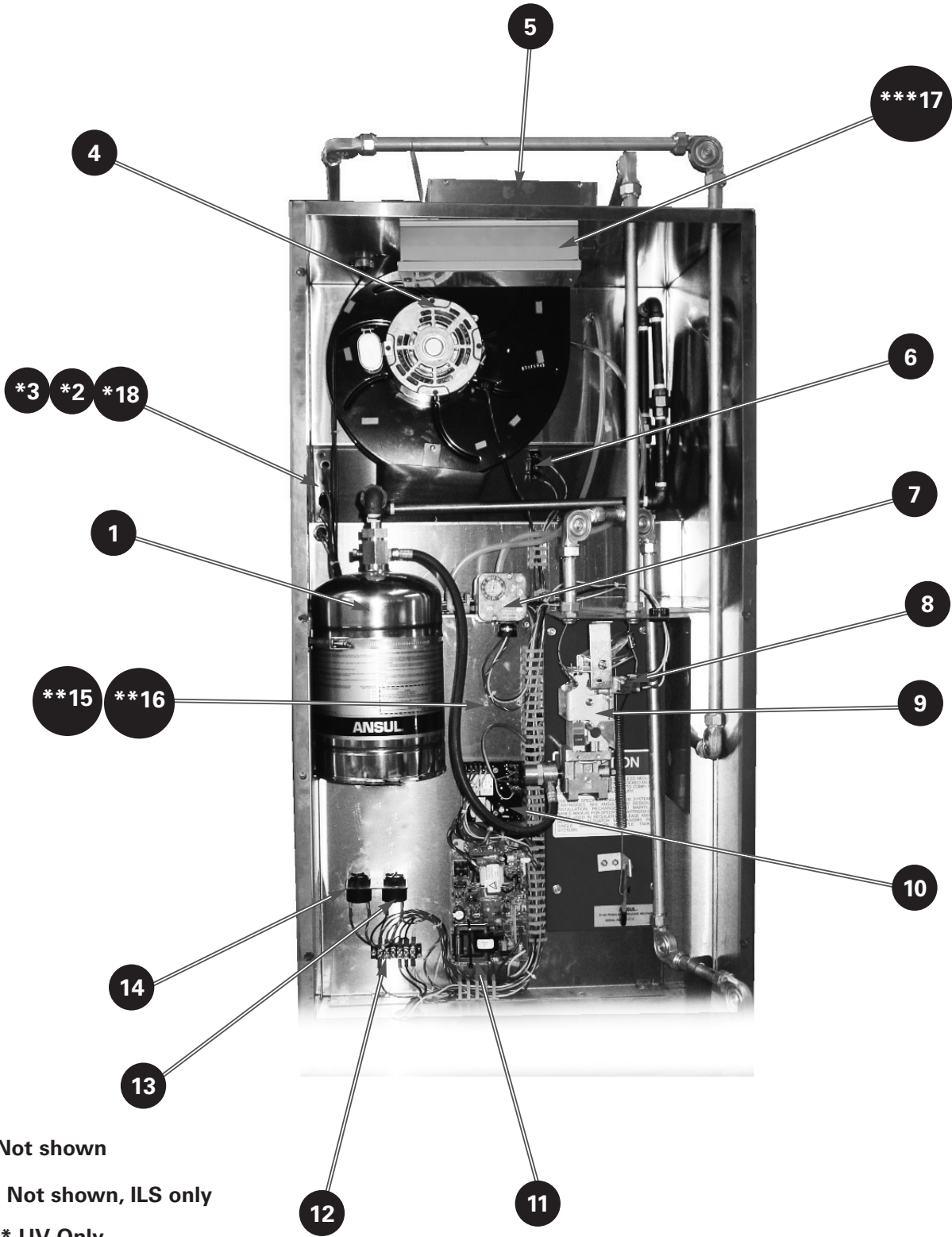
Item	Part Number	Qty.	Description
*1	90254	1	FILTER ACCESS PANEL, ASSY
**1	90262	1	FILTER ACCESS PANEL, ASSY, UV HOOD
2	30248	1	CHARCOAL FILTER ASSY, 20" x 12-3/8" x 2"
3	20520	1	EAC FILTER, 20"
4	42300	1	BAFFLE FILTER, 20" X 20" X 2"
*5	23200	1	SWITCH, SNAP ACTION, ROLLER TYPE
*6	21125	1	EAC CONTACT BOARD
7	30206	1	GREASE DRIP CUP
8	34750	1	DRIP CUP SAFETY PIN
**9	90226	1	UV LAMP ASSY, 16", REPLACEMENT ONLY

* Not shown

** UV Only



3.2 Rear Ventless Hood



- * Not shown
- ** Not shown, ILS only
- *** UV Only

3.2 Rear Ventless Hood

Item	Part Number	Qty.	Description
1	40811	1	S/S ANSUL TANK, 1-1/2 GAL
*2	23778	1	SWITCH, SIDE ROTARY, 240V, 30A, W/O ARM
*3	23779	1	ACTUATOR ARM ADAPTER
4	33589	1	BLOWER ASSEMBLY
5	46125	1	FIRE DAMPER, 10" X 10" (285°F LINK)
6	24237	1	SWITCH, PLUNGER, 250V, 15A
7	20390	1	VACUUM SWITCH, ADJUSTABLE
8	20002	1	SWITCH, SHUTDOWN & ALARM, 15A, 120V, ANSUL
9	40132	1	BRACKET & RELEASE MECHANISM, ANSUL
10	23776	1	ALARM & SHUTDOWN MODULE, AIR FILTER
11	24208	1	EAC POWER SUPPLY, W/DRIVER, 208-240V
12	23751	1	TERMINAL BLOCK
13	23782	1	SONALERT, 250V, CONTINUOUS TONE
14	22950	1	SONALERT, 250V, INTERMITTENT TONE
**15	20318	1	RELAY, 240 VAC, 10A
**16	20312	1	BASE, RELAY, PLUG-IN, DIN MOUNT
***17	20373	1	UV-LAMP ASSEMBLY (BALLAST & LAMP)
*18	90054	1	ACTUATOR ARM, BAFFLE SWITCH

* Not shown

** Not shown, ILS only

*** UV Only