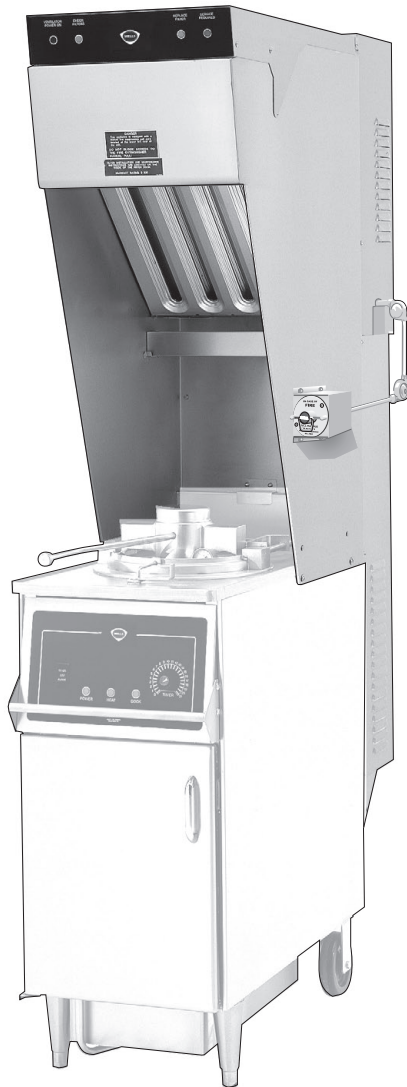
**WELLS MANUFACTURING**

265 Hobson Street, Smithville, Tennessee 37166

telephone: 314-678-6314

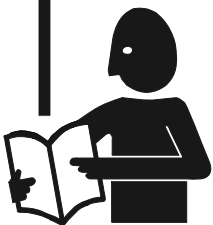
fax: 314-781-2714

[www.wells-mfg.com](http://www.wells-mfg.com)**SUPPLEMENTAL  
OWNERS MANUAL****VENTILATOR HOOD  
SECTION****FRYER MODELS****WVAE30F****WVPE30F****WVAE55F****WVAE55FS**

Includes  
**INSTALLATION  
USE & CARE  
EXPLODED VIEW  
PARTS LIST  
WIRING DIAGRAM**

**IMPORTANT: DO NOT DISCARD THIS MANUAL**

This manual is considered to be part of the appliance and is to be given to the OWNER or MANAGER of the restaurant, or to the person responsible for TRAINING OPERATORS of this appliance. Additional manuals are available from your WELLS DEALER.



**THIS MANUAL MUST BE READ AND UNDERSTOOD BY ALL PERSONS USING OR INSTALLING THIS APPLIANCE.** Contact your WELLS DEALER if you have any questions concerning installation, operation or maintenance of this equipment.

## LIMITED EQUIPMENT WARRANTY

Wells Manufacturing warranties new products to be free from defects in material and/or workmanship for a period of one [1] year from the date of original installation, except as noted below. Defects that occur as a result of normal use, within the time period and limitations defined in this warranty, will at Wells' discretion have the parts replaced or repaired by Wells or a Wells-authorized service agency.

### THIS WARRANTY IS SUBJECT TO ALL LISTED CONDITIONS.

Repairs performed under this warranty are to be performed by a Wells-authorized service agency. Wells will not be responsible for charges incurred or service performed by non-authorized repair agencies.

In all cases, the nearest Wells-authorized service agency must be used.

Wells will be responsible for normal labor charges incurred in the repair or replacement of a warrantied product within 50 miles (80.5 km) of an authorized service agency. Time and expense charges for anything beyond that distance will be the responsibility of the owner. All labor will need to be performed during regular service hours. Any overtime premium will be charged to the owner. For all shipments outside the U.S.A. and Canada, please see the International Warranty for specific details.

It is the responsibility of the owner to inspect and report any shipping damage claims, hidden or otherwise, promptly following delivery.

No mileage or travel charges will be honored on any equipment that is deemed portable. In general, equipment with a cord and plug weighing less than 50 lb. (22.7 kg) is considered portable and should be taken or shipped to the closest authorized service agency, transportation prepaid.

### CONTACT

Should you require any assistance regarding the operation or maintenance of any Wells equipment; write, phone, fax or email our service department. In all correspondence mention the model number and the serial number of your unit, as well as the voltage or type of gas you are using.

Business hours are 8:00 a.m. to 4:30 p.m. Central Standard Time  
 Telephone 314.678.6314  
 Fax 314.781.2714  
 Email customerservice@star-mfg.com  
 www.wells-mfg.com

## WARRANTY EXCLUSIONS

THE FOLLOWING WILL NOT BE COVERED UNDER WARRANTY.

- Any product which has not been installed, cleaned, maintained, or used in accordance with the directions published in the appropriate installation sheet and/or owner's manual as well as national and local codes, including incorrect gas or electrical connection. Wells is not liable for any unit which has been mishandled, abused, misapplied, subjected to chlorides, harsh chemicals, or caustic cleaners, damaged from exposure to hard water, modified by unauthorized personnel, damaged by flood, fire, or other acts of nature [or God], or which have an altered or missing serial number.
- Installation, labor, and job checkouts, calibration of heat controls, air and gas burner/bypass/pilot adjustments, gas or electrical system checks, voltage and phase conversions, cleaning of equipment, or seasoning of griddle surface.
- Replacement of fuses or resetting of circuit breakers, safety controls, or reset buttons.
- Replacement of broken or damaged glass components, quartz heating elements, and light bulbs.
- Labor charges for all removable parts in gas charbroilers and hotplates, including but not limited to burners, grates, and radiants.
- Any labor charges incurred by delays, waiting time, or operating restrictions that hinder a service technician's ability to perform service.
- Parts that fail or are damaged due to normal wear or labor for replacement of Items that can easily be replaced during a daily cleaning routine. such as but not limited to silicone belts, PTFE non-stick sheets, knobs, control labels, bulbs, fuses, quartz heating elements, baskets, racks, and grease drawers.
- Components that should be replaced when damaged or worn, but have been field-repaired instead [eg. field-welded fry pots].
- Any loss of business or profits.

### ADDITIONAL WARRANTIES

Specialty/chain specific versions may also have additional and/or extended warranties.

PRODUCTS	PARTS	LABOR
universal ventless hoods	2 years	1 year
canopy hoods	2 years	1 year
"Cook'n Hold" equipment [HW10, HWSMP, LLSC7, LLSC7WA, LLSC11, and LLSC11WA]	2 years	1 year
cast iron grates, burners, and burner shields	1 year	
original Wells parts sold to repair Wells equipment	90 days	
Service First	1 year	

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## INTRODUCTION

Thank You for purchasing this Wells Manufacturing appliance.

Proper installation, professional operation and consistent maintenance of this appliance will ensure that it gives you the very best performance and a long, economical service life.

This supplemental manual contains information and instructions pertinent to the hood section of this ventless appliance, and to its use and care.

For information regarding the fryer section, please refer to the associated fryer owners manual.

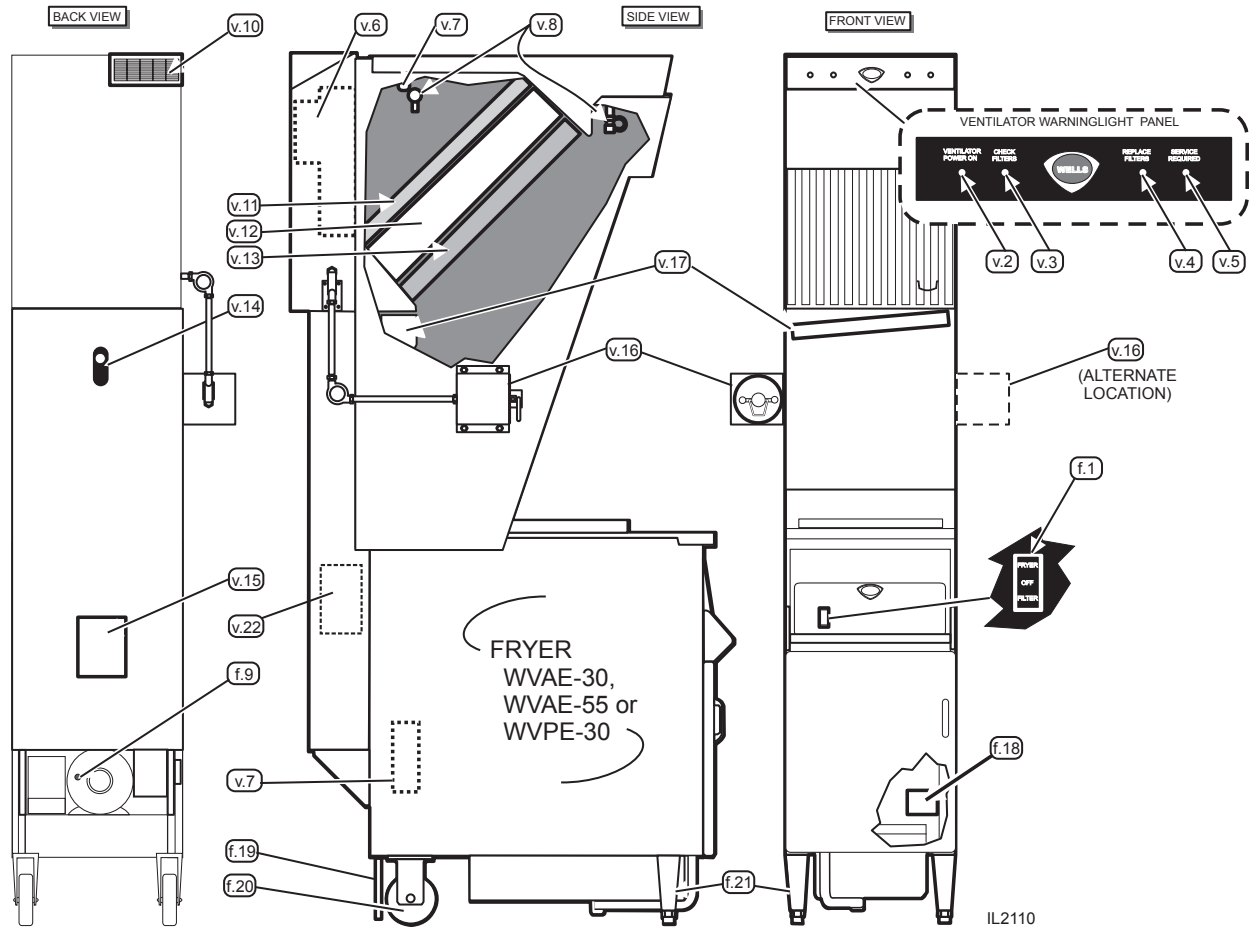
## DIMENSIONS

MODEL	WIDE	DEEP	HIGH
ALL	15.8" (402 mm)	43.7" (1110 mm)	76.4" (1941 mm)
	20" (508 mm) including manual pull station		
	32" (812.8 mm) Including manual pull station and Ansul® inspection window standoff		

## ELECTRICAL SPECIFICATIONS

MODEL	VOLTS	WATTS	AMPS
WFAE-30F WVPE-30F	208 1ø	9,000	43.3
	240 1ø	9,000	37.5
	208 3ø	9,000	25.0 (L1, L2, L3)
	240 3ø	9,000	22.0 (L1, L2, L3)
WVAE-30F EU WVPE-30F EU	308-415V	9,300	15.0 (L1)
			13.0 (L2 & L3) 3 (N)
WVAE-55F WVAE-55FS	208 3ø	17,000	47.8 (L1, L2, L3)
	240 3ø	17,000	41.0 (L1, L2, L3)
WVAE-55F EU WVAE-55FS EU	380-415V	17,400	26.0 (L1)
			24.0 (L2 & L3) 3 (N)

# FEATURES & OPERATING CONTROLS



NOTE: Items beginning with "f. ..." are part of the FRYER  
 Items beginning with "v. ..." are part of the VENTILATOR

## FEATURES & OPERATING CONTROLS (continued)

ITEM	DESCRIPTION	FUNCTION
f.1	POWER SWITCH ( <i>FILTER-OFF-FRYER</i> )	<i>FRYER</i> position energizes VENTILATOR POWER LIGHT and BLOWER. If, within 10 seconds, there is sufficient airflow for proper operation, POWER LIGHT will remain ON and fryer will operate.
v.2	VENTILATOR POWER LIGHT (green)	Glowes when FRYER POWER SWITCH is pressed to <i>FRYER</i> and adequate airflow has been proven.
v.3	CHECK FILTERS LIGHT (amber)	Glowes when GREASE BAFFLE and/or HEPA FILTER are not properly installed. When this light is lit, fryer is disabled.
v.4	REPLACE FILTERS LIGHT (amber)	Glowes if either CHARCOAL FILTER or HEPA FILTER are due for replacement. Fryer will continue to operate, but filters must be changed in a timely manner before they clog and disable the fryer.
v.5	SERVICE REQUIRED LIGHT (red)	Glowes when there is insufficient airflow for proper operation (either CHARCOAL FILTER or HEPA FILTER, or both, plugged). When this light is lit, fryer is disabled.
v.6	VENTILATOR BLOWER	Provides ventilation airflow.
v.7	FUSIBLE LINK LOCATION	FUSIBLE LINKS provide fire protection by melting at a pre-set temperature and activating the fire suppression system.
v.8	FIRE SUPPRESSION NOZZLE(S)	Disperse the fire suppression media.
f.9	FILTER PUMP MOTOR OVERLOAD RESET	Provides over-temperature protection for the FILTER PUMP MOTOR. Reset manually by pressing the red button.
v.10	VENTILATOR EXHAUST COLLAR	Ventilator discharge. DO NOT BLOCK. Contains fire damper with pre-installed 285°F (141°C) fusible link.
v.11	CHARCOAL FILTER	See page 10.
v.12	HEPA AIR FILTER	
v.13	GREASE BAFFLE	
v.14	ANSUL® SYSTEM STATUS INDICATOR	Indicates status of Ansul® fire suppression system (i.e. <i>COCKED</i> or <i>FIRED</i> ).
v.15	ACCESS TO AUTOLIFT MOTOR	On fryers with automatic basket lifting device (WVAE-series) allows servicing of lift mechanism.
v.16	MANUAL PULL STATION	Allows manual discharge of fire suppression system. Shown on left side, may also be mounted on right side. IMPORTANT: PULL STATION must be field installed by an ANSUL® technician.
v.17	GREASE CUP	Catches drippings from GREASE BAFFLE.
f.18	DRIP PAN	Catches any liquid draining from top of fryer section.
f.19	STABILIZER	Prevents unit from tipping backwards.
f.20	RIGID (REAR) CASTERS	Allows unit to be easily positioned by slightly lifting front of unit.
<b>IMPORTANT</b>		
If a remote pull station is installed, both rear casters must be replaced with fixed legs in order to deter movement of unit. MOVING AN APPLIANCE EQUIPPED WITH A REMOTE PULL STATION WILL DISCHARGE THE FIRE SUPPRESSION SYSTEM.		
f.21	FIXED (FRONT) LEGS	Allows the unit to be leveled.
v.22	ANSUL® INSPECTION WINDOW	Allows the Ansul® components to be viewed without removing the back cover (optional)

## PRECAUTIONS AND GENERAL INFORMATION



### **WARNING: SHOCK HAZARD**

All servicing requiring access to non-insulated electrical components must be performed by a factory authorized technician. DO NOT open any access panel which requires the use of tools. Failure to follow this warning can result in severe electrical shock.



### **CAUTION: RISK OF DAMAGE**

DO NOT connect or energize this appliance until all installation instructions are read and followed. Damage to the appliance will result if these instructions are not followed.



### **CAUTION: HOT SURFACE**

Exposed surfaces can be hot to the touch and may cause burns.

#### **IMPORTANT:**

The fryer is disabled when the filters are plugged to the point of insufficient airflow for proper operation. Also, the fryer is disabled if either the HEPA filter or grease baffle is removed.

It is the responsibility of the store management to maintain sufficient spares of HEPA air filters to avoid prolonged shutdown of the fryer when this filter is expended. Charcoal and HEPA air filters cannot be cleaned. Wells Manufacturing assumes no liability for loss of business due to filter related shutdown.

This ventilator hood is part of an engineered system and is intended for use in commercial establishments only.

This ventilator and attendant fryer are intended to prepare food for human consumption. No other use is recommended or authorized by the manufacturer or its agents.

Operators of this appliance must be familiar with the appliance use, limitations and associated restrictions. Operating instructions must be read and understood by all persons using or installing this appliance.

This ventilator hood system is designed to reduce odor emissions, but will not completely eliminate all cooking odors. Air exchange rates at the installation site must comply with the requirements of the local jurisdictional authority. To ensure that odors do not accumulate, recommended minimum air exchange is 400 cfm into *and out of* the site.

Cleanliness of this appliance is essential to good sanitation. Read and follow all included cleaning instructions and schedules to ensure the safety of the food product.

Disconnect this appliance from electrical power before performing any maintenance or servicing.

This appliance is not jet stream approved. Do not direct water jet or steam jet at this appliance, or at any control panel or wiring. Do not splash or pour water on, in or over any controls, control panel or wiring. Do not wash floor around this appliance with water or steam jet. Do not attempt to wash charcoal or HEPA air filters. Water will cause their immediate failure and disable the fryer.

Exposed surfaces of this appliance can be hot to the touch and may cause burns.

Cooking oil will be very hot when in use. Contact will cause severe injury. Wear appropriate heat protective apron and gloves when using this fryer.

Do not operate this appliance if the control panel is damaged. Do not operate solid state versions of this appliance if the keypad section of the control panel is torn or broken. Call your Authorized Wells Service Agent for service.

Avoid storing flammable or combustible materials in, on or near the appliance.

The technical content of this manual, including any wiring diagrams, schematics, parts breakdown illustrations and/or adjustment procedures, is intended for use by qualified technical personnel.

Any procedure which requires the use of tools must be performed by a qualified technician.

This manual is considered to be a permanent part of the appliance. This manual and all supplied instructions, diagrams, schematics, parts breakdown illustrations, notices and labels must remain with the appliance if it is sold or moved to another location.

This appliance is made in the USA. Unless otherwise noted, this appliance has American sizes on all hardware.

## AGENCY LISTING INFORMATION

This appliance conforms to NSF Standard 4 for sanitation only if installed in accordance with the supplied *Installation Instructions* and maintained according to the instructions in this manual.

This appliance is  and  Listed under UL File E146882.



STD 4



E146882



E146882

## INSTALLATION

### UNPACKING & INSPECTION

Carefully remove the appliance from the carton. Remove all protective plastic film, packing materials and accessories from the appliance before connecting electrical power or otherwise performing any installation procedure.

Carefully read all instructions in this manual before starting any installation.

Read and understand all labels and diagrams attached to the Fryer and to the ventilator.

Carefully account for all components and accessories before discarding packing materials.

#### COMPONENTS

- 1 ea. Grease baffle
- 1 ea. HEPA air filter
- 1 ea. Charcoal filter
- 1 ea. Grease cup
  
- 1 ea. Fire suppression agent tank
- 1 ea. Fire suppression agent (Ansul<sup>®</sup> Low pH) 1.5 gal.
- 1 ea. Fire suppression system charging cartridge
- 1 ea. Manual pull station kit  
(includes mounting hardware - must be installed by an authorized ANSUL<sup>®</sup> distributor only)
  
- (as req'd) Components and accessories specific to the fryer. Store these components in a convenient place for later use
  
- .Optional Ansul<sup>®</sup> inspection window and equipment standards.

**NOTE:** DO NOT discard the carton or other packing materials until you have inspected the appliance for hidden damage and tested it for proper operation. Refer to *SHIPPING DAMAGE CLAIM PROCEDURE* on the inside front cover of this manual.



**WARNING:**  
**RISK OF INJURY**

Installation procedures must be performed by a qualified technician with full knowledge of all applicable electrical codes. Failure can result in personal injury and property damage.

#### IMPORTANT:

Fire suppression system must be charged and certified by an authorized Ansul<sup>®</sup> distributor. Fryer will not operate until the fire suppression system has been charged.



## INSTALLATION (continued)



### **WARNING:** **SHOCK HAZARD**

All servicing requiring access to non-insulated electrical components must be performed by a factory authorized technician.

DO NOT open any access panel which requires the use of tools. Failure to follow this warning can result in severe electrical shock.



### **CAUTION:** **RISK OF DAMAGE**

DO NOT connect or energize this appliance until all installation instructions are read and followed. Damage to the appliance will result if these instructions are not followed.

### **IMPORTANT:**

If a remote pull station is to be used, replace the rear casters with fixed legs.

### SERVICE TECHNICIAN INSTALLATION NOTES

Installation and start up must be performed by an Authorized Installation Company.

Installer must complete the WARRANTY REGISTRATION / FRYER CHECKOUT form, and record fryer installation particulars on the CUSTOMER SERVICE DATA form in this manual.

IT IS THE RESPONSIBILITY OF THE INSTALLER TO verify that this FRYER and VENTILATOR installation is in compliance with the specifications listed in this manual, with local code requirements, and in accordance with the STANDARD FOR VENTILATION CONTROL AND FIRE PROTECTION OF COMMERCIAL COOKING OPERATIONS as detailed in N.F.P.A 96 (current edition).

Certain codes require fryers to be restrained with a TETHER or other RESTRAINT DEVICE. It is the RESPONSIBILITY OF THE INSTALLER to check with the AUTHORITY HAVING JURISDICTION, in order to ascertain the applicability of this requirement to THIS SPECIFIC FRYER INSTALLATION. Any restraint device must allow access to the back and sides of the unit to provide for servicing and maintenance, and must not interfere with the operation of the fire suppression system.

### **SETUP**

Setup the appliance only on a firm, level, non-combustible surface. Verify local codes for requirements. Concrete, tile, terrazzo or metal surfaces are recommended. Metal over combustible material may not meet code for non-combustible surfaces.

Verify vertical clearances. Ventilator fryers require a minimum of 96" (floor to overhead) to allow or adequate air circulation.

Verify that the VENTILATOR HOOD ASSEMBLY is properly and securely assembled to the FRYER before beginning the installation procedure. Ventilator may have become dislodged during shipping or unpacking.

Verify that the unit sits firmly ON ALL FOUR LEGS / CASTERS. With a spirit level, check that the appliance is level front-to-back and side-to-side. With the adjustable legs, adjust as required to level the appliance. In order to prevent tipping, legs must be adjusted such that all four legs / casters are in firm contact with the floor.

Adjust rear stabilizer bars (see item f.19, page 2) to within 1/4" (6 mm) of floor to allow unit to be moved without tipping backwards.

Refer to the *Installation Instruction Sheet* for required clearances. Maintain required clearances between the appliance and adjacent combustible surfaces.

### **Inspection Window**

For units equipped with the Ansul® component inspection window, install the equipment stand-off bracket



## INSTALLATION (continued)

### ELECTRICAL INSTALLATION

Refer to the nameplate on the front of the fryer. Verify ELECTRICAL SERVICE POWER. Voltage and phase must match the nameplate specifications, and available electrical service amperage must meet or exceed the specifications listed on page 1 of this manual.

- Wiring must be no less than 12 ga. solid copper wire, rated for at least 75°C.
- Wire gauge, insulation type and temperature rating, as well as type, size and construction of conduit, must meet or exceed applicable specifications of local codes and of the National Electrical Code.

Fryers are shipped from the factory wired for 3Ø electrical service. Refer to the three-phase wiring diagram included with this fryer, and verify that field wiring conforms to this diagram.

**NOTE:** 30# FRYERS are FIELD CONVERTIBLE to 1Ø.

If single-phase operation is required, refer to the 3-phase to 1-phase Instructions included with the FRYER, and verify that both internal wiring and field wiring conform to the included single-phase wiring diagram.



### WARNING SHOCK HAZARD

Electrical connections must be made by a licensed electrician.



### CAUTION: SHOCK HAZARD

The ground lug of this appliance must be connected to a suitable building ground.

**IMPORTANT:**  
WVAE-55F and WVAE-55FS units **MUST NOT BE CONVERTED TO SINGLE PHASE OPERATION.** Conversion of these units to single phase operation invalidates the UL listing and will void the warranty.

**IMPORTANT:**  
Contact a licensed electrician to install and connect electrical power to the appliance.

**IMPORTANT:**  
Damage due to being connected to the wrong voltage or phase is **NOT** covered by warranty.

## INSTALLATION (continued)

**DANGER**

**DANGER  
FIRE HAZARD**

Fire suppression system must be charged and certified by an authorized Ansul® distributor.

DO NOT attempt to modify or bypass the fire suppression system.

An uncontrolled fire can cause serious injury or death.

### NOTE:

If the fire suppression system is discharged, a buzzer will sound continuously. The fryer will remain inoperable until the fire suppression system is serviced, recharged and reset by an authorized Ansul® distributor.

Charging of the Ansul® Fire Suppression system must be in accordance with Ansul® Design, Installation, Recharge and Maintenance Manual, #418087.

### NOTE:

If a REMOTE MANUAL PULL STATION is installed, moving the FRYER for servicing may cause the Ansul® system to discharge. In this case, the unit must only be installed with four fixed legs (i.e. remove rear casters and replace with legs). Additional legs may be ordered through an Authorized Wells Service Agency. See page 19.

## FIRE SUPPRESSION SYSTEM INSTALLATION

FIRE SUPPRESSION SYSTEM is comprised of a container of Ansul® Low pH liquid fire suppression media, a system pressurization canister and associated plumbing and controls.

Two FUSIBLE LINKS are utilized for automatic actuation, and a MANUAL PULL STATION for manual actuation. Two NOZZLES disperse the fire suppression media.

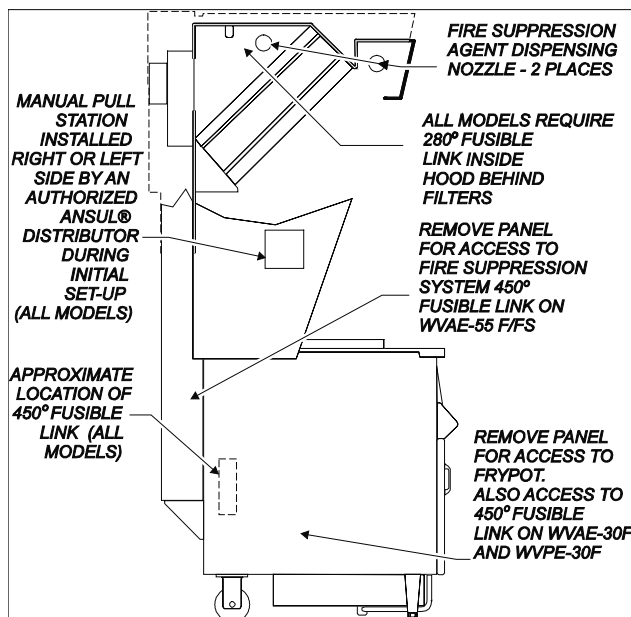
The hood is supplied with a field installed MANUAL PULL STATION, which must be set-up at the time of the fryer installation by an authorized Ansul® distributor. See below and following page for installation details.

If the fryer is installed such that the supplied manual pull station cannot be installed, a REMOTE MANUAL PULL STATION may be required by local codes. Any such remote manual pull station must be installed by an authorized Ansul® distributor in accordance with the AUTHORITY HAVING JURISDICTION.

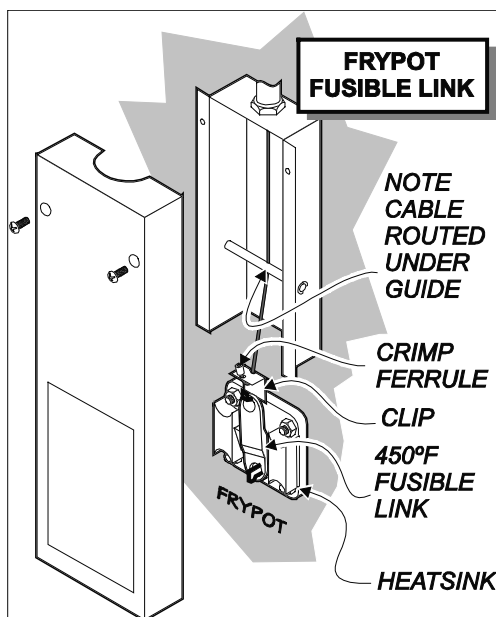
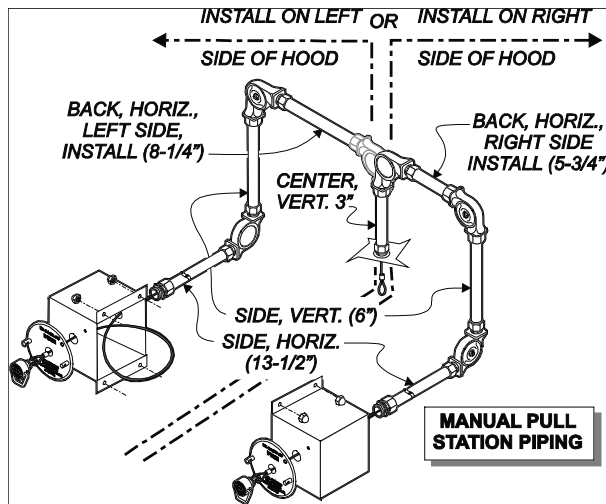
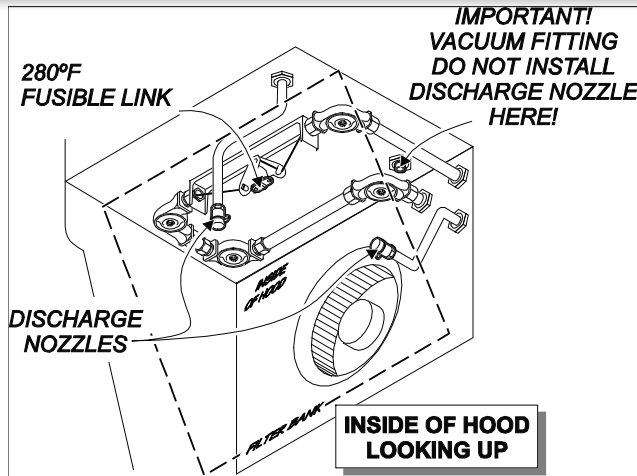
When the fire suppression system discharges, fryer heating element(s) and controls are de-energized, and fire suppression media discharged. Fire suppression media will form an emulsion designed to both smother and cool the oil.

The PRIMARY 450°F FUSIBLE LINK is located on the frypot. This link will melt and discharge the fire suppression system should both the TEMPERATURE CONTROL THERMOSTAT and the HIGH LIMIT CONTROL fail. The SECONDARY 280°F FUSIBLE LINK is located in the filter plenum, and will protect against a fire in the plenum. Either link melting will discharge the fire suppression media through both NOZZLES, and cause a buzzer to sound.

The MANUAL PULL STATION and any similar REMOTE MANUAL PULL STATION will activate the fire suppression system when the ring on the pull station is pulled to its full extent.



## INSTALLATION (continued)



**DANGER** DANGER  
BURN HAZARD  
HOT OIL SPILL

Any additional remote pull station must not be installed on the front or sides of the fryer forward of the ventilator side panels.

Discharge of the fire extinguishing system into hot oil will cause hot foam to spill over from the frypot.

Serious burns and other injuries can result from contact with hot oil and from slipping in spilled oil.

### Exclusive Anti-Fire System

In the unlikely event that both the temperature control thermostat and hi-limit detector fail, and the oil temperature climbs above the safety limit, the fire suppression system will discharge, cooling the oil below the oil's (approximately) 540°F auto-ignition temperature, and preventing a fire from occurring.

## INSTALLATION (continued)

### NOTE:

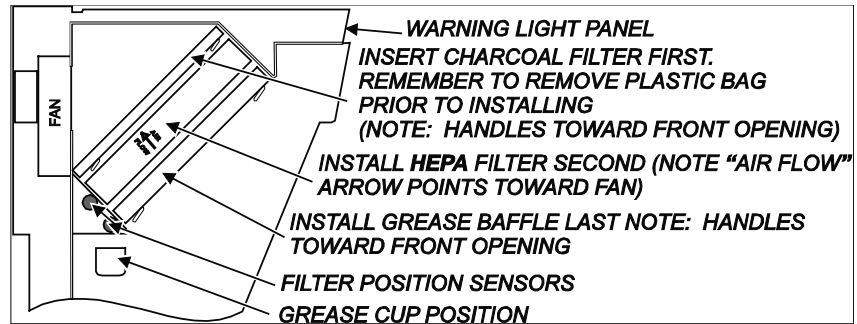
The GREASE BAFFLE and HEPA AIR FILTER actuate magnetic reed switches when they are in their proper positions. They must be properly installed or the fryer heater elements will not be energized.

### NOTE:

Remove the protective plastic bag from the optional charcoal filter before installing.

Installing the filter without removing the plastic bag will block the air flow. This will cause the ventilator to shut down 10 seconds after start-up, and the fryer will not heat.

## FILTER INSTALLATION



Remove the protective plastic bag from charcoal filter before installing.

Note air flow direction arrow on each filter, and verify that arrow points toward plenum when filter is properly installed.

Install filters by inserting top of each into top filter support inside hood assembly. Pivot bottom of each filter toward rear of hood assembly and drop it into its respective bottom filter support. Seat each filter firmly into the bottom filter support.

Install CHARCOAL FILTER first, followed by HEPA AIR FILTER. Install GREASE BAFFLE last.

## GREASE CUP & DRIP PAN INSTALLATION

Install GREASE CUP into brackets below grease baffle.

**Note:** Failure to install GREASE CUP will allow grease and moisture from GREASE BAFFLE to drop into FRYPOT, creating both a SAFETY HAZARD (hot oil splatter) and a HEALTH HAZARD (contamination of the cooking oil).

Install DRIP PAN into mounting bracket behind fryer door at lower right front of fryer.

**Note:** Failure to install DRIP PAN will allow grease, moisture and other liquids that accumulate on the fryer top panel to drip onto floor, creating both a SAFETY HAZARD (slip and fall hazard) and a HEALTH HAZARD (substance capable of supporting bacteria).



**WARNING**  
SLIP AND FALL  
HAZARD

DO NOT operate fryer unless drip pan is installed. Oil will drip onto floor creating a slipping hazard.

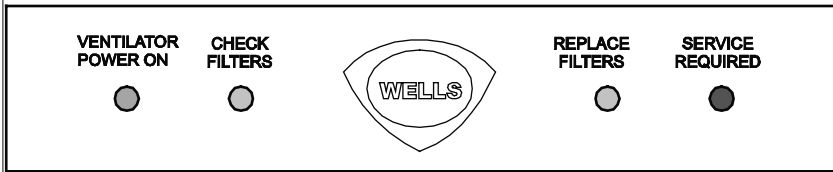


**CAUTION**  
BURN HAZARD

DO NOT operate fryer unless grease cup is installed. Moisture dripping into hot oil will cause hot oil to splatter.

## OPERATION

### VENTILATOR WARNING LIGHT PANEL



**NOTE:** Fryer must be operated in accordance with the instructions in the accompanying FRYER OPERATION MANUAL.

During normal operation, VENTILATOR POWER ON light will be the only light illuminated on VENTILATOR WARNING LIGHT PANEL.

If the CHECK FILTERS light illuminates, check both GREASE BAFFLE and the HEPA AIR FILTER for proper installation.

If REPLACE FILTERS light illuminates, replace both HEPA AIR FILTER and CHARCOAL FILTER. Always replace both filters at the same time.

**NOTE:** REPLACE FILTERS light is a warning that filters are nearing the end of their service life. The fryer will continue to operate for a period of time after REPLACE FILTER LIGHT turns ON to allow continued fryer operation through a peak period. However, filters must be replaced within a short time period or they will clog, disabling the fryer.

If SERVICE REQUIRED light illuminates, filters are restricted to the point of insufficient airflow for proper operation. Fryer is shut down until the underlying clogged filter situation has been corrected. Normally, replacing both HEPA AIR FILTER and CHARCOAL FILTER will remedy the condition. Reset the unit by turning FRYER POWER SWITCH to OFF, then back to FRYER.

A failure of incoming electric power will cause a shut down of the unit. Reset the unit by turning the FRYER POWER SWITCH to OFF, then back to FRYER.



**CAUTION:**  
HOT SURFACE

Exposed surfaces can be hot to the touch and may cause burns.



**CAUTION:**  
SHOCK HAZARD

DO NOT splash or pour water or grease onto control panel or wiring.

### IMPORTANT:

The fryer is disabled when REPLACE FILTERS light is illuminated. Note that the fryer cannot operate if the HEPA air filter is removed.

It is the responsibility of the store management to maintain sufficient spares of HEPA air filters to avoid prolonged shutdown of the fryer when this filter is expended.

Charcoal and HEPA air filters cannot be cleaned.

Wells Manufacturing assumes no liability for loss of business due to filter related shutdown.

## CLEANING INSTRUCTIONS



**CAUTION:**  
HOT SURFACE

Exposed surfaces can be hot to the touch and may cause burns.



**CAUTION:**  
SHOCK HAZARD

DO NOT splash or pour water or grease onto control panel or wiring.

**PRECAUTIONS:** Disconnect unit from electric power and allow to cool. Cover frypot to prevent oil contamination.

**FREQUENCY:** Weekly

**TOOLS:** Mild detergent, clean non-abrasive towels

**NOTE:** Ventilator section to be cleaned in conjunction with fryer. Refer to Fryer Operation Manual for fryer cleaning instructions.

1. Disconnect unit from electric power and allow to cool. Cover frypot to prevent oil contamination.
2. Remove GREASE BAFFLE, GREASE CUP and DRIP PAN.
3. Empty GREASE CUP and DRIP PAN into an appropriate grease collection receptacle.
4. Clean GREASE BAFFLE, GREASE CUP and DRIP PAN in a sink or dishwasher using mild detergent and warm water.
5. Dry components with a clean non-abrasive cloth. Reinstall DRIP PAN, GREASE CUP, and GREASE BAFFLE.
6. Wipe exterior of fryer and ventilator with a clean cloth moistened with warm water and mild detergent. Rinse by wiping with a clean cloth moistened with warm water.
7. Uncover the frypot and reconnect unit to electric power.

Procedure is complete

## CLEANING INSTRUCTIONS (continued)

**PRECAUTIONS:** Disconnect unit from electric power and allow to cool  
Cover frypot to prevent oil contamination

**FREQUENCY:** Monthly

**TOOLS:** Mild detergent, clean non-abrasive towels

**NOTE:** Ventilator section to be cleaned in conjunction with fryer  
Refer to Fryer Operation Manual for fryer cleaning instructions.

1. Disconnect unit from electric power and allow to cool.  
Cover frypot to prevent oil contamination.
2. Remove GREASE BAFFLE, HEPA AIR FILTER and CHARCOAL FILTER.
3. Wipe interior of ventilator with a clean cloth moistened with warm water and mild detergent. Rinse by wiping with a clean cloth moistened with warm water. DO NOT clean by spraying.
4. Dry ventilator thoroughly with a clean non-abrasive cloth. Reinstall CHARCOAL FILTER, HEPA AIR FILTER and GREASE BAFFLE..
5. Uncover the frypot and reconnect unit to electric power.

Procedure is complete



**CAUTION:**  
HOT SURFACE

Exposed surfaces can be hot to the touch and may cause burns.



**CAUTION:**  
SHOCK HAZARD

DO NOT splash or pour water or grease onto control panel or wiring.

**IMPORTANT:**

DO NOT wash HEPA air filter or CHARCOAL filter. Washing these filters will clog them, and cause fryer to be disabled.

**IMPORTANT:**

DO NOT clean interior of ventilator by spraying. Spraying can contaminate the cooking oil, and may cause internal damage to the blower, operation proofing system and/or fire suppression system. Clean by wiping only.



## REQUIRED MAINTENANCE

### IMPORTANT:

A signed and dated FRYER HOOD MAINTENANCE LOG must be maintained on the premises, and shall be made available for inspection by the authority having jurisdiction upon request.  
See page 15.

USE AND MAINTENANCE SHALL BE IN ACCORDANCE WITH THE STANDARD FOR VENTILATION CONTROL AND FIRE PROTECTION OF COMMERCIAL COOKING OPERATIONS, N.F.P.A. 96 (current edition).

### 3-MONTH MAINTENANCE:

Thoroughly clean entire HOOD PLENUM and BLOWER section.

### 6-MONTH MAINTENANCE:

Inspection and testing of total operation including FIRE DAMPER and all SAFETY INTERLOCKS shall be performed by qualified service personnel.

All FIRE SUPPRESSION SYSTEM actuation components including MANUAL PULL STATION and any REMOTE MANUAL PULL STATION must be inspected for proper operation in accordance with the maintenance schedule published in ANSUL® R-102 SYSTEM DESIGN, INSTALLATION, RECHARGE AND MAINTENANCE MANUAL (418087).

On WVAE-Model fryers, open the rear cover access door and lubricate the LIFT WORM threads with molybdenum disulfide grease (see item v.15 page 2) .

### ANNUAL (12-MONTH) MAINTENANCE:

FIRE SUPPRESSION SYSTEM FUSIBLE LINKS must be replaced.

NOZZLES and MANUAL PULL STATION must be cleaned in accordance with ANSUL® R-102 SYSTEM DESIGN, INSTALLATION, RECHARGE AND MAINTENANCE MANUAL (418087).

### 12-YEAR MAINTENANCE:

The FIRE SUPPRESSION AGENT TANK and ¼" FLEX HOSE must be HYDROSTATICALLY TESTED, and the FIRE EXTINGUISHING AGENT must be REPLACED in accordance with the maintenance schedule published in ANSUL® R-102 SYSTEM (STANDARD UL 300 LISTED). This maintenance to be performed by qualified Ansul® service personnel only.

## TROUBLESHOOTING SUGGESTIONS

Problem	Possible Cause	Suggested Remedy
Unit will not operate (no indicators lights lit)	Disconnected from electric power	Reconnect to electric power Reset circuit breaker for unit
Unit will not operate (buzzer sounds)	Fire suppression system not set	Contact an authorized Ansul® distributor for repairs
CHECK FILTER light lit	HEPA air filter or grease baffle not in position	Properly install HEPA filter and grease baffle
REPLACE FILTERS light lit	HEPA air filter and charcoal filters nearing end of service life	Arrange to replace both HEPA and charcoal filters in a timely manner
SERVICE REQUIRED light lit (fryer not operating)	HEPA air filter and charcoal filters plugged	Replace both HEPA and charcoal filters
	Fire damper in exhaust collar has closed	Contact an authorized Wells service agent for repairs
	One or more vacuum sensing lines or ports plugged	Contact an authorized Wells service agent for repairs
	NOTE: If, after 10 seconds, there is insufficient airflow for proper operation, SERVICE REQUIRED light will illuminate and fryer will be de-energized. Press FRYER POWER SWITCH to <i>OFF</i> , then back to <i>FRYER</i> to reset system.	

**NOTE:**

FILTERS are the only user serviceable components in this ventilator hood system. For all problems that cannot be remedied by servicing the filters, contact:

Fryer or ventilator section - authorized Wells service agency

Fire suppression system - authorized Ansul® distributor

**IMPORTANT:**

Contact ANSUL® for fire suppression system installation, set-up and service:

Ansul Incorporated

1-800-TO-ANSUL (1-800-862-6785)

One Station Street

Marinette, WI 54143-2542

website <http://www.ansul.com>

**IMPORTANT:**

Parts used in the Ansul® fire suppression system are not serviceable by the owner/operator.

Procedures for servicing fire suppression equipment are described in:

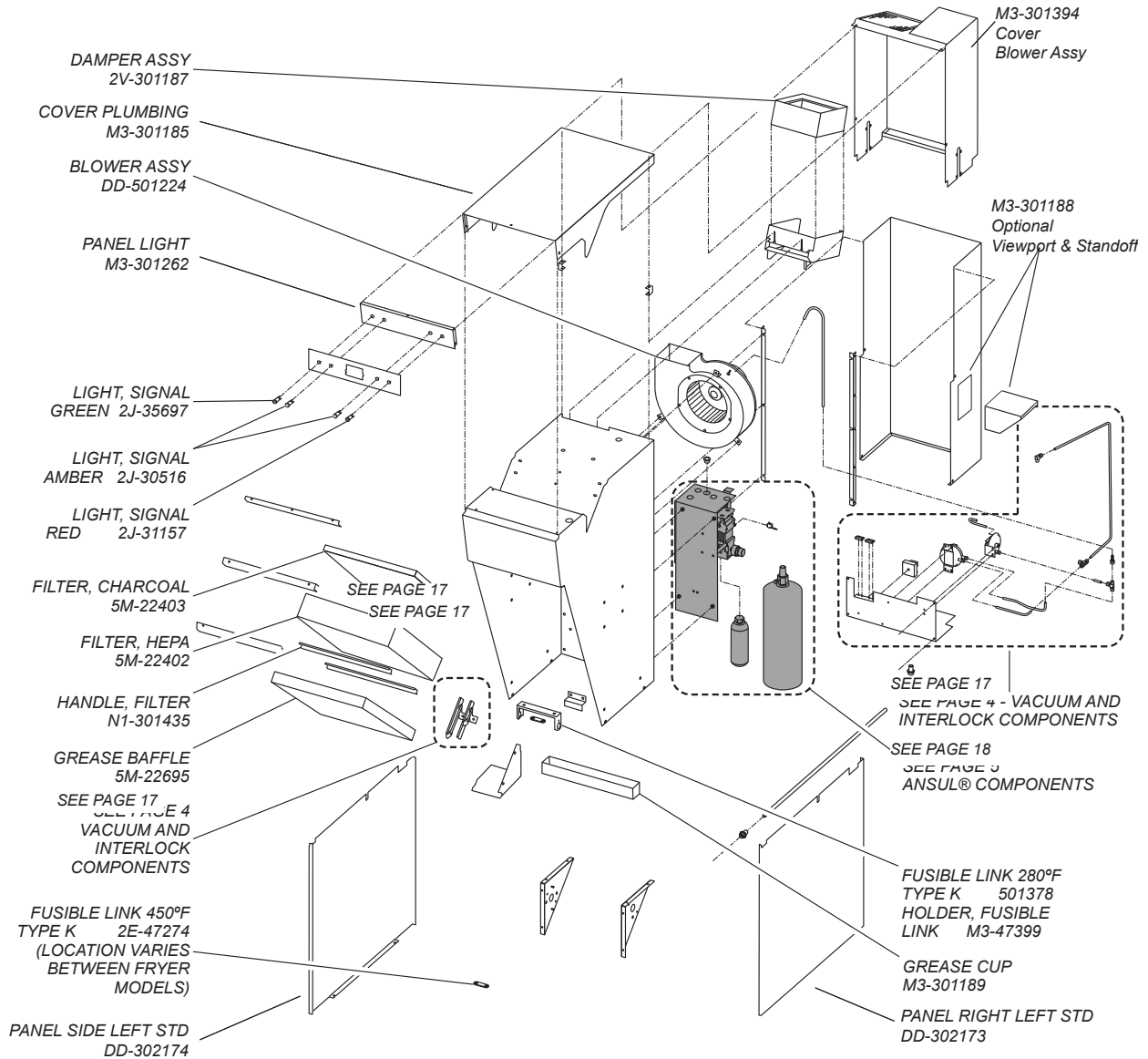
*ANSUL® R-102 SYSTEM DESIGN, INSTALLATION, RECHARGE AND MAINTENANCE MANUAL*  
(418087, current edition)

**NOTE:**

ANSUL® Manual 41807 and Wells Bulletin 301646 are intended for use by authorized Ansul® service personnel only.

# EXPLODED VIEW PARTS LIST

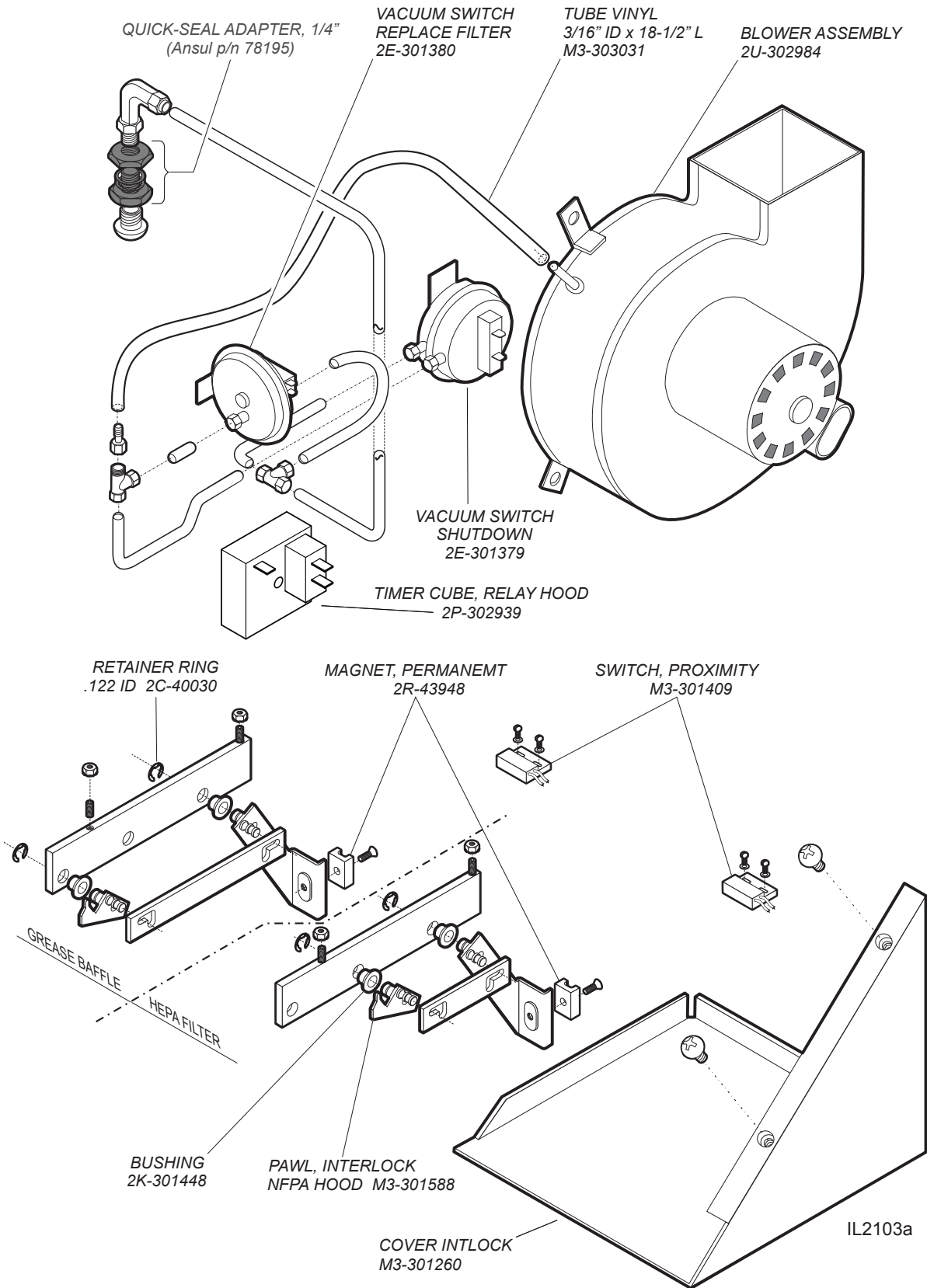
## CABINET AND HOOD SECTION COMPONENTS



IL2114B

# EXPLODED VIEW PARTS LIST

## VACUUM AND INTERLOCK SYSTEM COMPONENTS

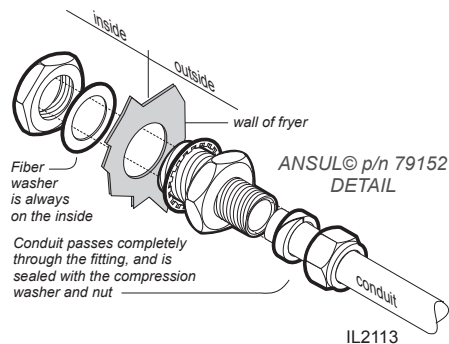
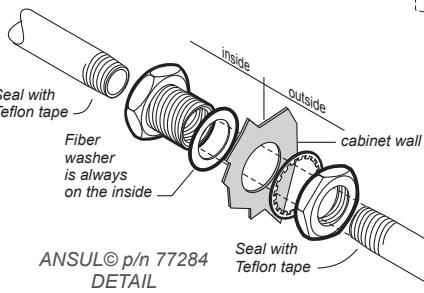
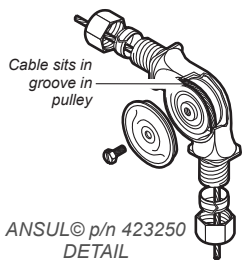
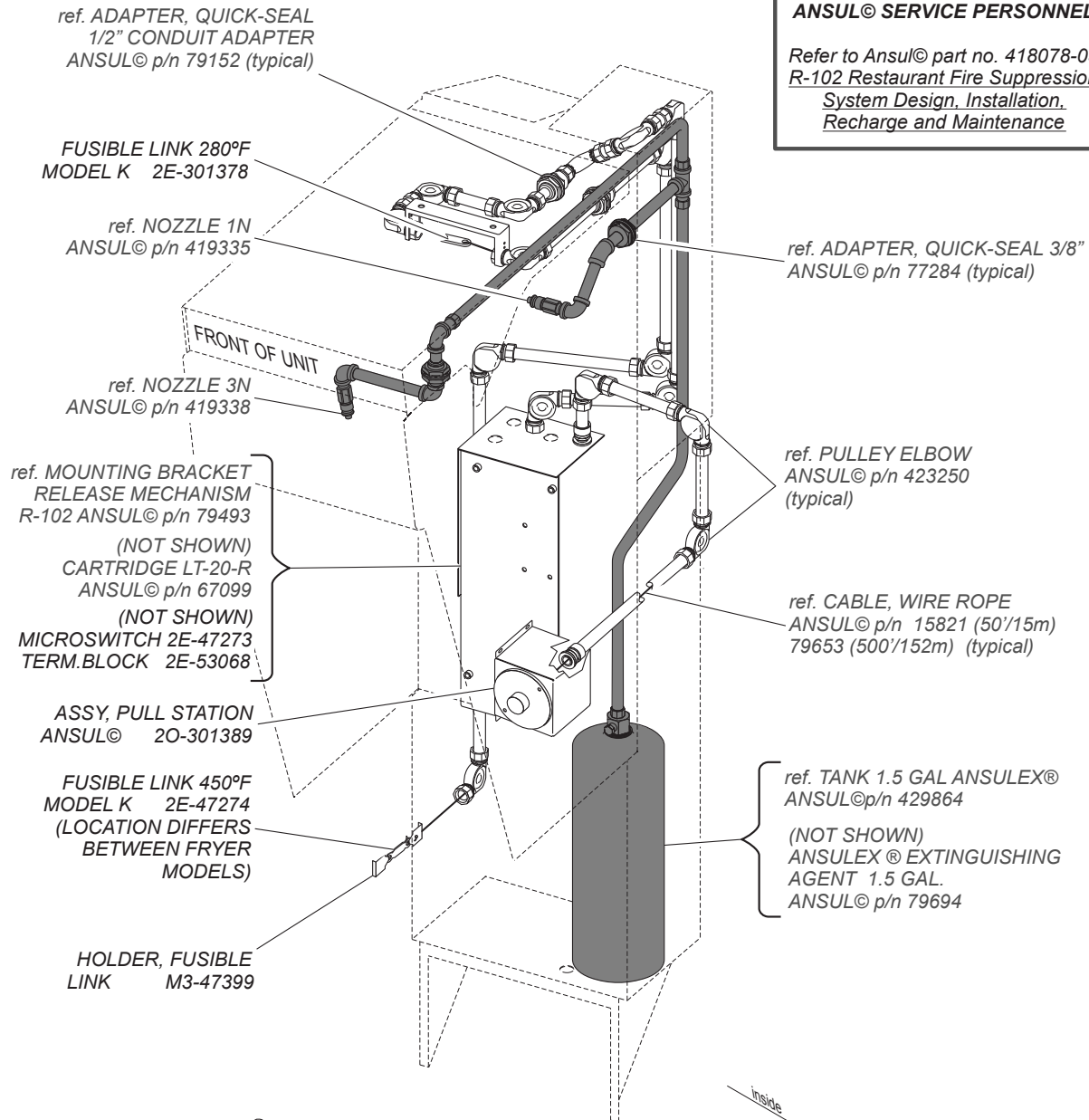


# EXPLODED VIEW PARTS LIST

## FIRE DETECTION AND SUPPRESSION SYSTEM COMPONENTS

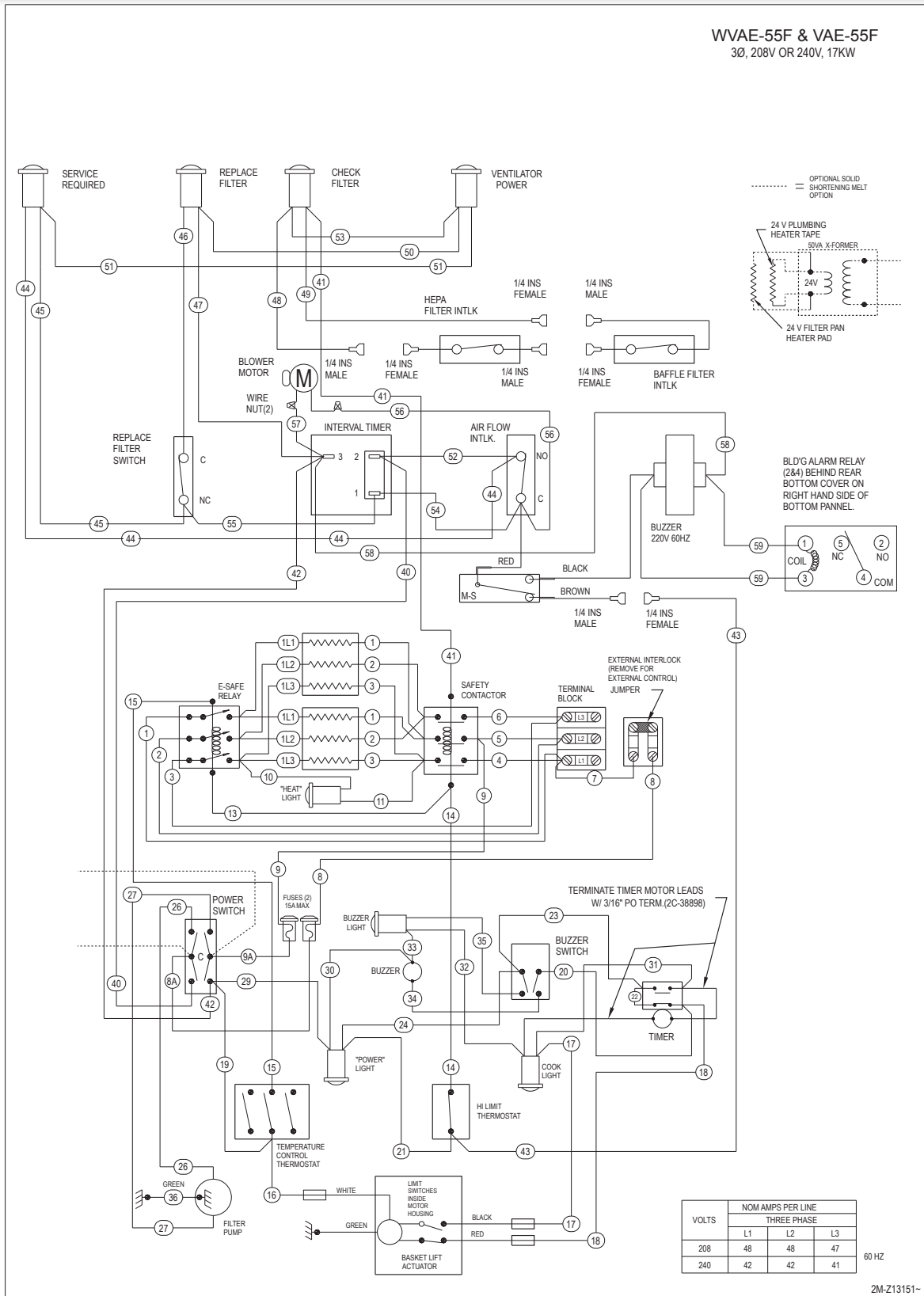
**FOR USE ONLY BY AUTHORIZED  
ANSUL® SERVICE PERSONNEL**

Refer to Ansul® part no. 418078-05  
R-102 Restaurant Fire Suppression  
System Design, Installation,  
Recharge and Maintenance

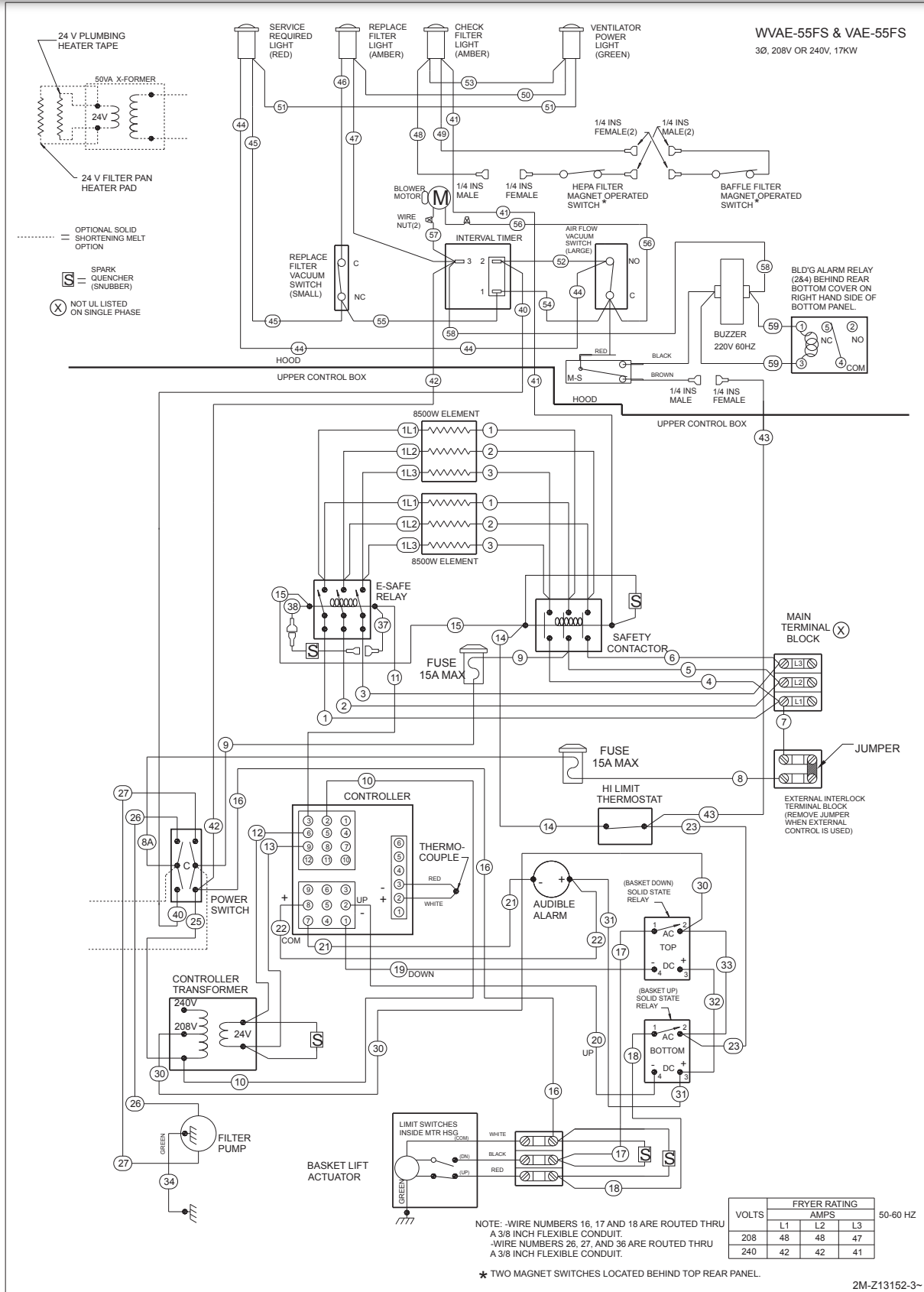


# WIRING DIAGRAM

WVAE-55F & VAE-55F  
3Ø, 208V OR 240V, 17KW

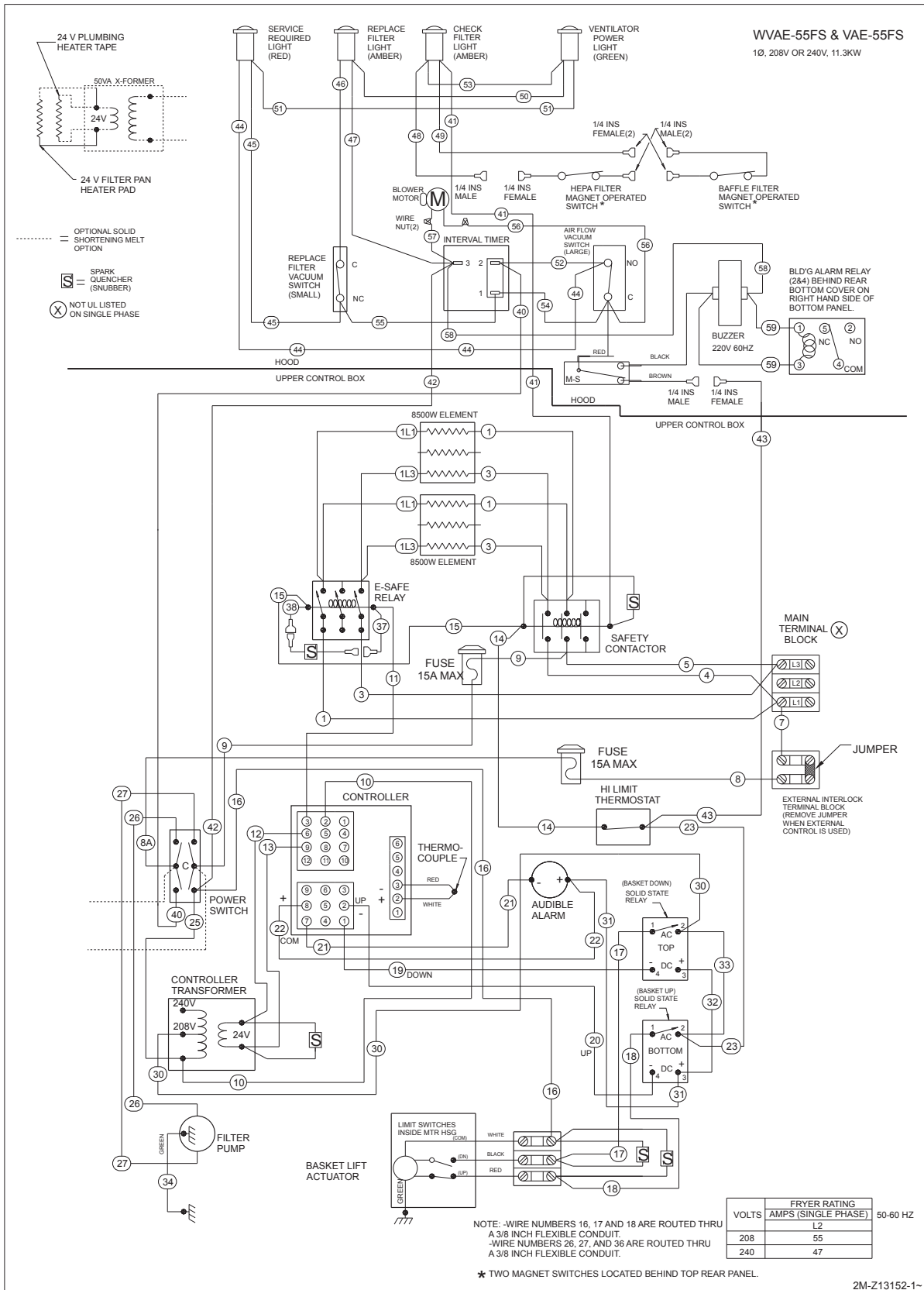


# WIRING DIAGRAM





# WIRING DIAGRAM

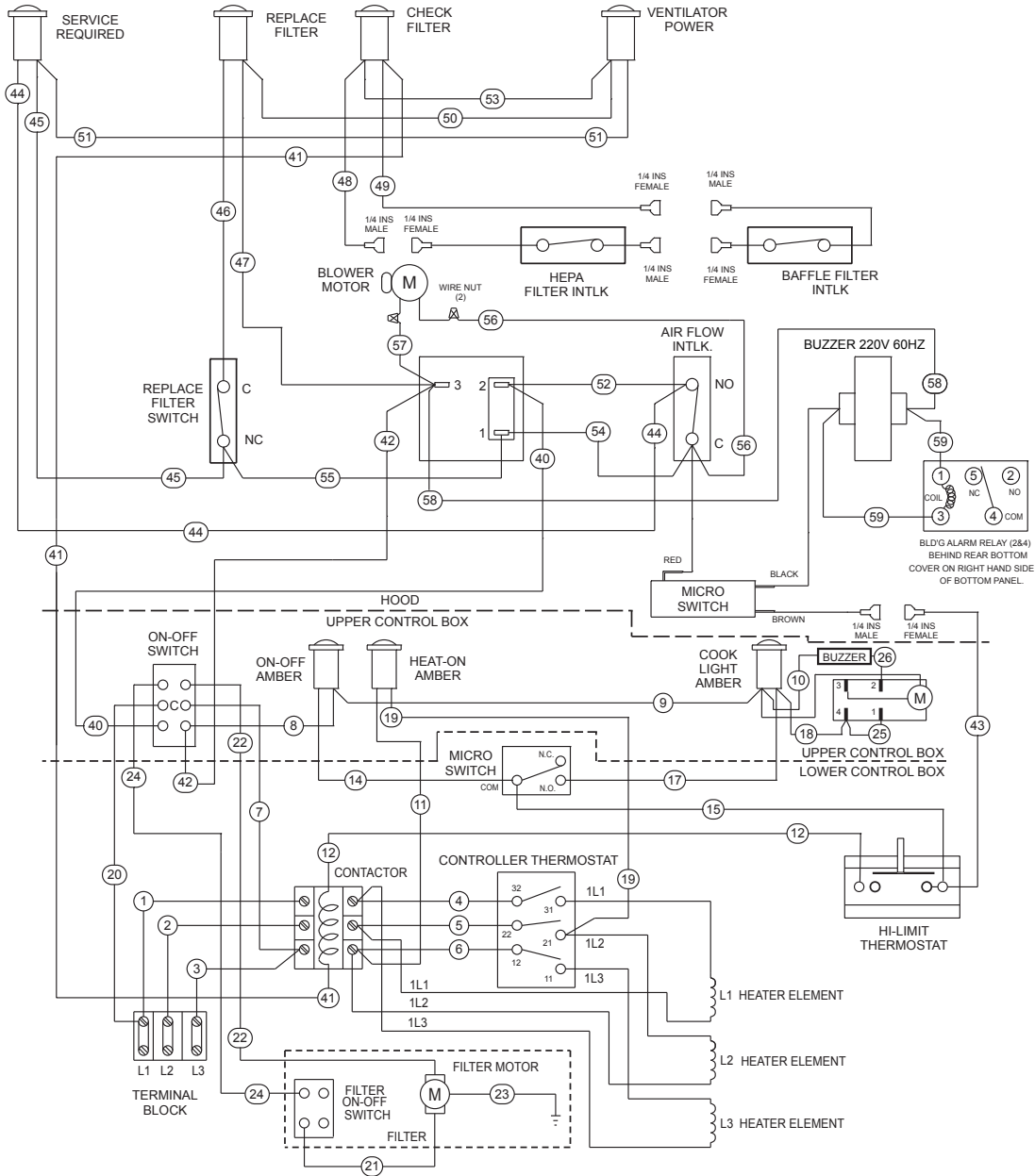


M381 2M-301603 Owners Manual (Supplemental) NFPA Hood

# WIRING DIAGRAM

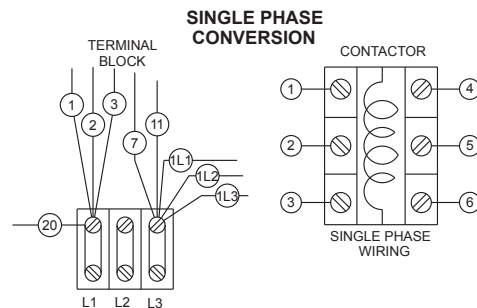
## WIRING DIAGRAM FOR VPE-30F & WVPE-30F

208V OR 240V, 9KW  
SINGLE OR 3 PHASE - WIRED 3 PHASE AS SHOWN



VOLTS	NOM AMPS PER LINE				60 HZ
	THREE PHASE			ONE PHASE	
	L1	L2	L3		
208	26	25	26	44	
240	23	22	23	39	

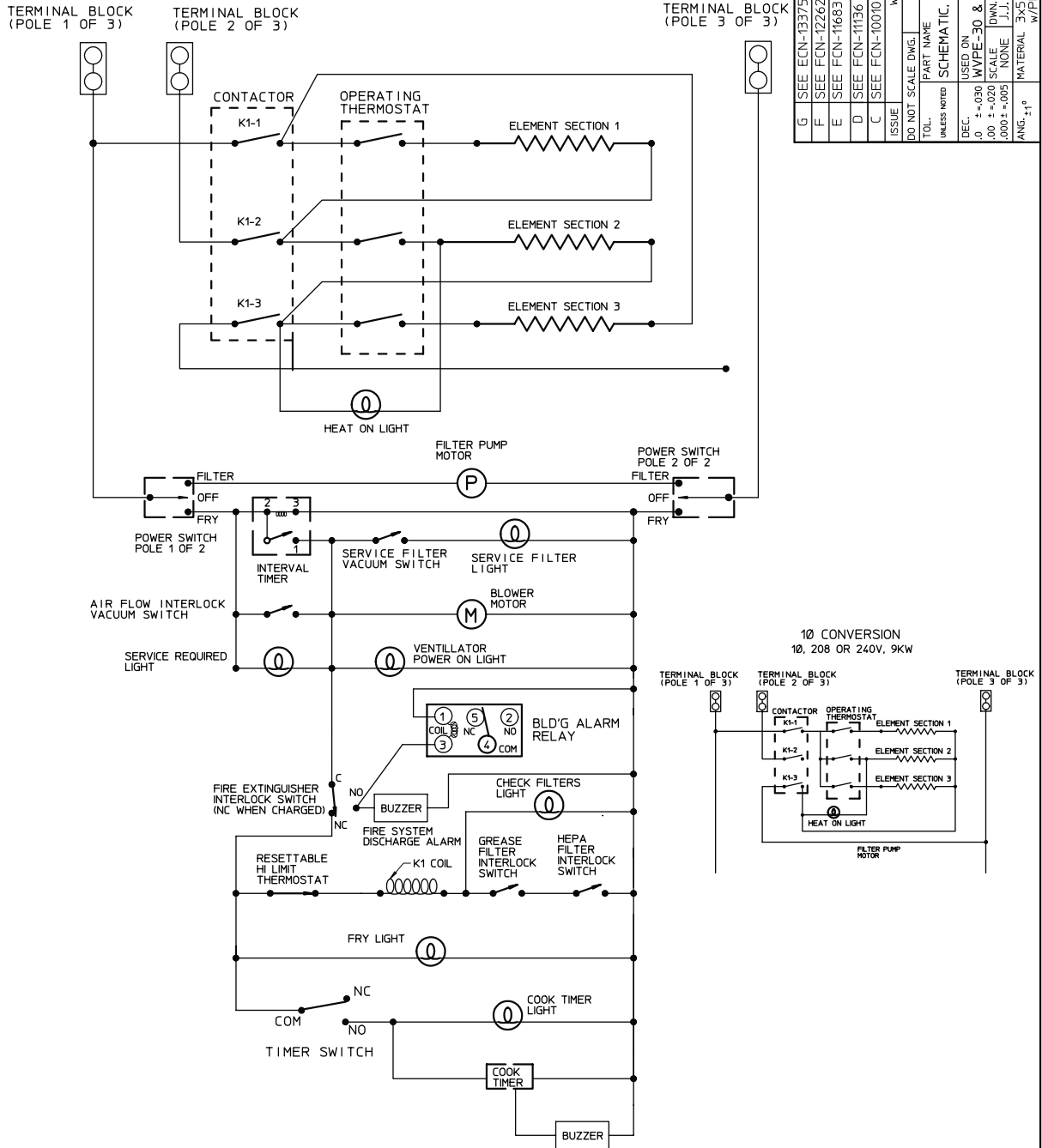
REV. F P/N 2M-301412



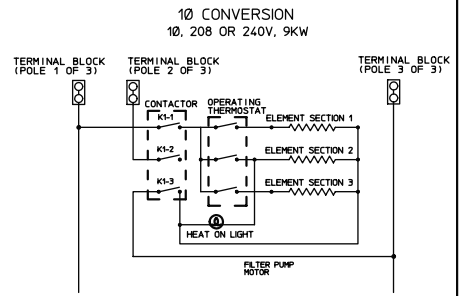
# WIRING DIAGRAM

301442  
ISSUE G  
SH.1 OF 1

## WIRING SCHEMATIC FOR WVPE-30 & VPE-30F FRYER 3Ø, 208 OR 240V, 9KW

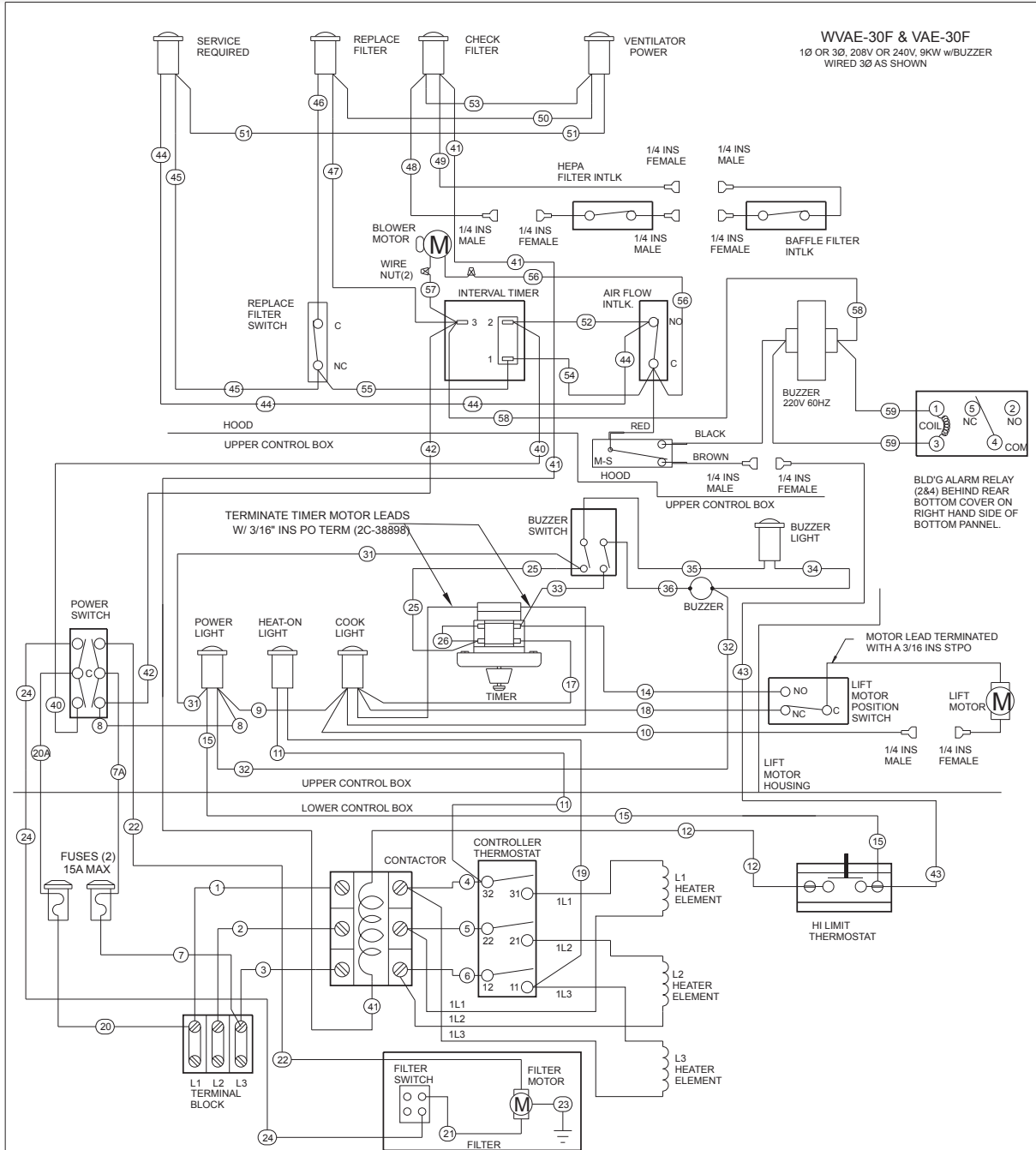


CHK	L.M.	CMO	DVP	10.29.07
G	SEE ECN-1375	DTL	09-	-02
F	SEE FCN-12262	LND	03-	-01
E	SEE FCN-11683	L.M.		
D	SEE FCN-11136	PKHNL	11-31-98	
C	SEE FCN-10070	BY	APP	DATE
ISSUE	WAS	REVISIONS		
DO NOT SCALE DIMS.				
TOL.	PART NAME			
UNLESS NOTED	SCHEMATIC, WIRING, 208/240V 3Ø			
DEC.	USED ON			
0 ±.030	WVPE-30 & VPE-30F			
.00 ±.020	SCALE	DOWN	ENG.	CKD.
.000 ±.005	J.J.	J.W.	G.C.	VERDI. INV.
ANG. ±.1°	MATERIAL	3X5 LABEL ON WHT STK	PART NO. *	
		W/PERM ADHESIVE BACK	PART NO. *	301442



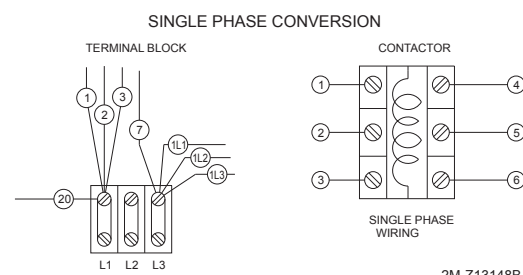
P/N: 301442 REV G

# WIRING DIAGRAM



WVAE-30F & VAE-30F  
 1Ø OR 3Ø, 208V OR 240V, 9KW w/BUZZER  
 WIRED 3Ø AS SHOWN

VOLTS	NOM AMPS PER LINE				60 HZ
	THREE PHASE			ONE PHASE	
	L1	L2	L3		
208	27	25	27	45	
240	24	22	24	40	



2M-Z13148B

M381 2M-301603 Owners Manual (Supplemental) NFPA Hood

## WELLS MANUFACTURING CO. FRYER HOOD MAINTENANCE LOG

OPERATION	DATE / AGENT																			
CLEAN PLENUM GREASE BAFFLE AND BLOWER (max. interval: 3 months)																				
REPLACE HEPA AIR FILTER AND CHARCOAL AIR FILTER (as required)																				
✦ INSPECT / TEST FIRE SUPPRESSION SYSTEM (max. interval: 6 months)																				
✦ INSPECT / TEST FILTER INTERLOCKS (max. interval: 6 months)																				
✦ REPLACE FUSIBLE LINK IN FLU DAMPER (max. interval: 12 months)																				
✦ REPLACE FUSIBLE LINK IN HOOD PLENUM (max. interval: 12 months)																				
✦ REPLACE FUSIBLE LINK ON FRYPOT (max. interval: 12 months)																				
✦ CLEAN DISCHARGE NOZZLE IN PLENUM BEFORE FILTERS (max. interval: 12 months)																				
✦ CLEAN DISCHARGE NOZZLE IN PLENUM AFTER FILTERS (max. interval: 12 months)																				
✦ CLEAN MANUAL PULL STATION and any REMOTE MANUAL PULL STATION (max. interval: 12 months)																				
✦ TO BE PERFORMED BY QUALIFIED SERVICE PERSONNEL ONLY																				

**ANSULEX Low pH**  
QUICK IDENTIFIER (In Plant Common Name)

Manufacturer's Name:	ANSUL INCORPORATED	Emergency Telephone No.:	CHEMTREC (800) 424-9300 or (703) 527-3887
Address:	One Stanton Street, Marinette, WI 54143-2542	Other Information Calls:	(715) 735-7411
Prepared By:	Safety and Health Department	Date Prepared:	February 1, 1999

**SECTION 1 – IDENTITY**

Common Name: (used on label) (Trade Name and Synonyms)	ANSULEX Low pH Liquid Fire Suppressant	CAS No.:	N/A
Chemical Name:	N/A This is a Mixture	Chemical Family:	Mixture
Formula:	N/A		

**SECTION 2 – INGREDIENTS**

PART A – HAZARDOUS INGREDIENTS				
Principal Hazardous Component(s) (chemical and common name(s)):	Wt. %	CAS No.	ACGIH TLV	Acute Toxicity Data
None	N/A	N/A	N/A	N/A
PART B – OTHER INGREDIENTS				
Other Component(s) (chemical and common name(s)):	Wt. %	CAS No.	ACGIH TLV	Acute Toxicity Data
Proprietary mixture of organic and inorganic salts	48.0-50.0	N/A	N/E	NDA
Phosphoric Acid	.2	7664-38-2	N/E	NDA
EDTA	0.65	64-02-8	N/E	NDA
Yellow-Green Fluorescent Dye	.011	518-47-8	N/E	Oral LD <sub>50</sub> (rat) 6800 mg/kg
Water	Approx. 50.0	7732-18-5	N/E	NDA

**SECTION 3 – PHYSICAL AND CHEMICAL CHARACTERISTICS (Fire and Explosion Data)**

Boiling Point:	113 °C	Specific Gravity (H <sub>2</sub> O = 1):	1.33	Vapor Pressure (mm Hg):	Not Determined
Percent Volatile by Volume (%):	Approx. 50	Vapor Density (Air = 1):	1.03	Evaporation Rate (Butyl Acetate = 1):	Approx. 0.005
Solubility in Water:	100%	Reactivity in Water:	Mild exothermic reaction		
Appearance and Odor:	Fluorescent Yellow colored liquid, mild odor				
Flash Point:	None to boiling	Flammable Limits in Air % by Volume:	N/A	Extinguisher Media:	N/A
Auto-ignition Temperature:	N/A				
Special Fire Fighting Procedures:	NONE – THIS IS AN EXTINGUISHING AGENT				
Unusual Fire and Explosion Hazards:	None				

**SECTION 4 – PHYSICAL HAZARDS**

Stability:	Unstable <input type="checkbox"/>	Conditions to Avoid:	N/A
	Stable <input checked="" type="checkbox"/>		
Incompatibility (Materials to Avoid):	Reactive metals, ClF <sub>3</sub> , electrically energized equipment, any material reactive with water.		
Hazardous Decomposition Products:	Not established, acrid fumes.		
Hazardous Polymerization:	May Occur <input type="checkbox"/>	Conditions to Avoid:	N/A
	Will Not Occur <input checked="" type="checkbox"/>		

**SECTION 5 – HEALTH HAZARDS**

**ANSULEX Low pH (Continued)**

Threshold Limit Value:	None Established		
Routes of Entry:	Irritant.		
Eye Contact:			
Skin Contact:	Irritant.		
Inhalation:	Not an expected route of entry. Can be irritating to mucous membranes.		
Ingestion:	Irritating to mucous membranes. Acute Oral LD <sub>50</sub> (Sprague-Dawley rats) 825.5 mg/kg.		
Signs and Symptoms:	Acute Overexposure:	Material irritates skin, eyes, and mucous membranes.	
	Chronic Overexposure:	None known.	
Medical Conditions Generally Aggravated by Exposure:	None known.		
Chemical Listed as Carcinogen or Potential:	National Toxicology Program:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	I.A.R.C. Monographs: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
		OSHA: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

**SECTION 6 – EMERGENCY AND FIRST AID PROCEDURES**

Eye Contact:	Flush and irrigate with water for 15 minutes while holding eyelids open. If irritation persists, seek Medical attention.
Skin Contact:	Wash thoroughly with soap and water; if irritation persists, seek Medical attention.
Inhalation:	Fresh air if symptoms occur. Seek Medical attention if irritation persists.
Ingestion:	Dilute by drinking large quantities of water.

**SECTION 7 – SPECIAL PROTECTION INFORMATION**

Respiratory Protection (Specify Type):	N/A		
Ventilation:	Local Exhaust:	N/A	Mechanical (General): N/A
Protective Gloves:	Rubber gloves for spill/leak.	Eye Protection:	Chemical goggles recommended during spill/leak procedures.
Other Protective Clothing or Equipment:	Eye wash and safety showers are good safety practice.		

**SECTION 8 – SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES**

Precautions to be Taken in Handling and Storage:	Store in original container. Keep tightly closed. Keep separate from acid.
Other Precautions:	See incompatibility information in Section 4.
Steps to be Taken in Case Material is Released or Spilled:	Stop leaks. Contain Spill. Remove as much as possible. Place in closed container for proper disposal. Wash spill area with large amounts of water to remove traces and neutralize.
Waste Disposal Methods:	Dispose of in compliance with local, state, and federal regulations.

**HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATINGS**

<b>HAZARD INDEX:</b>	
4 Severe Hazard	0 HEALTH
3 Serious Hazard	0 FLAMMABILITY
2 Moderate Hazard	
1 Slight Hazard	0 REACTIVITY
0 Minimal Hazard	

N/A = Not Applicable      NDA = No Data Available      N/E = None Established

ANSUL and ANSULEX are registered trademarks.

Internet Address: <http://www.ansul.com>



**NOTES**

## PARTS & SERVICE

### DESCRIPTION

LEG KIT, REAR, WVAE, WVPE  
HEPA AIR FILTER  
CHARCOAL FILTER

### PART NO.

WS-22692  
WS-22402  
WS-22403

**IMPORTANT:** Use only factory authorized service parts and replacement filters. For factory authorized service, or to order factory authorized replacement parts, contact your Wells authorized service agency, or call:

Wells Manufacturing  
265 Hobson Street  
Smithville, Tennessee 37166 U.S.A.

Service Dept.  
phone: (314) 678-6314  
fax: (314) 781-2714

Service Parts Department can supply you with the name and telephone number of the WELLS AUTHORIZED SERVICE AGENCY nearest you.

### CUSTOMER SERVICE DATA

please have this information available if calling for service

RESTAURANT \_\_\_\_\_ LOCATION \_\_\_\_\_  
INSTALLATION DATE \_\_\_\_\_ TECHNICIAN \_\_\_\_\_  
SERVICE COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
TELEPHONE NUMBER (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

EQUIPMENT MODEL NO. \_\_\_\_\_  
EQUIPMENT SERIAL NO. \_\_\_\_\_  
VOLTAGE: (check one)  208  240  380-415



Wells Bloomfield proudly supports CFESA  
Commercial Food Equipment Service Association

**SERVICE TRAINING - QUALITY SERVICE**



**CUSTOMER SATISFACTION**



**WELLS MANUFACTURING**

265 Hobson Street, Smithville, Tennessee 37166

telephone: 314-678-6314

fax: 314-781-2714

[www.wells-mfg.com](http://www.wells-mfg.com)