**WELLS MANUFACTURING**

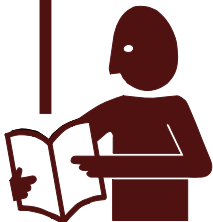
265 Hobson Street, Smithville, Tennessee 37166

telephone: 314-678-6314

fax: 314-781-2714

www.wells-mfg.com*Model WVU-1***OWNERS MANUAL****VENTLESS UNIVERSAL
MODULAR HOOD SYSTEM****for
ELECTRIC
COOKING
APPLIANCES****MODEL
WVU-1
WVU-1P****Manual 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 manual contains information and instructions for the ventless ventilation hood, its use and care.

For information regarding cooking appliance(s), please refer to the manufacturer's operation manual.

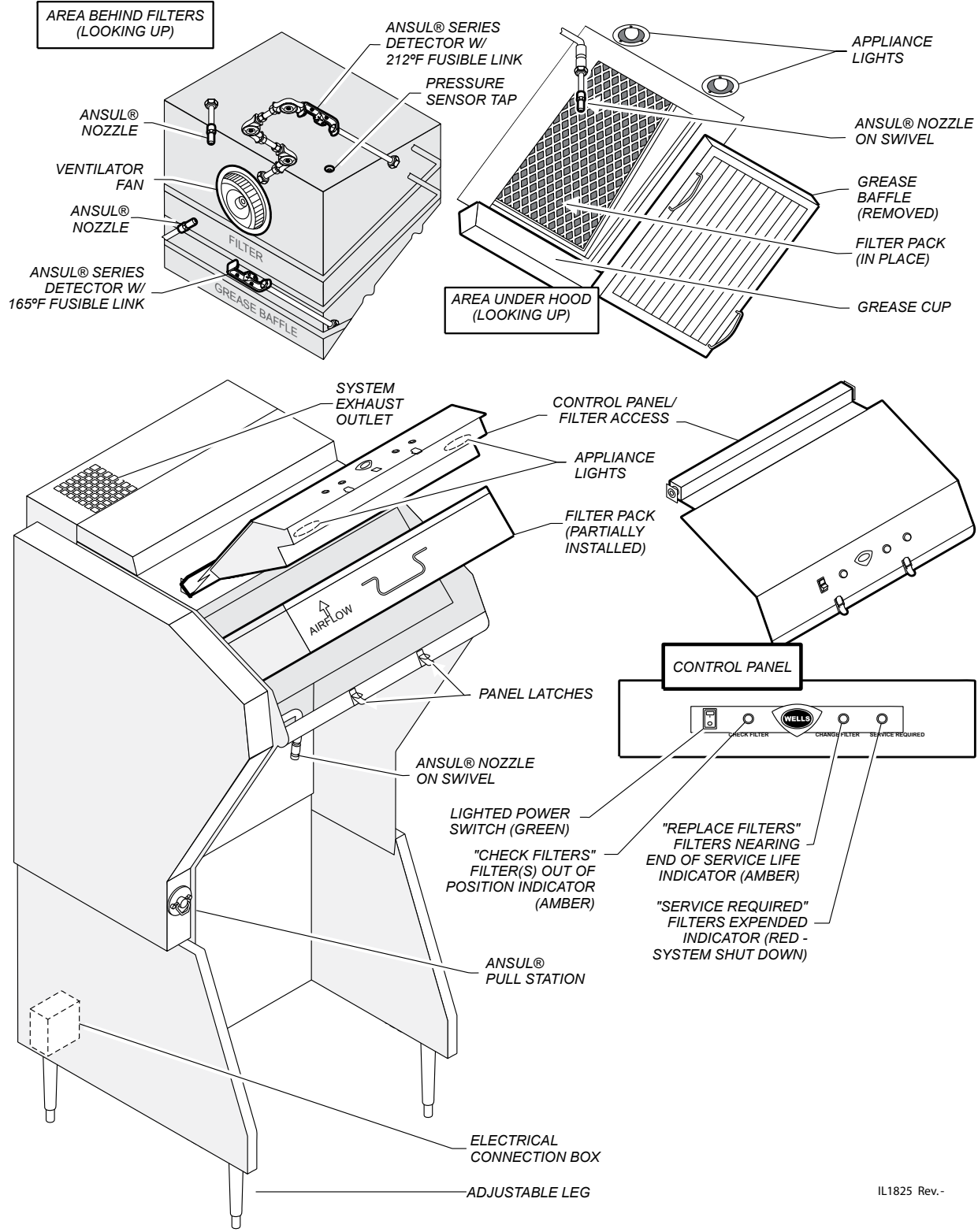
ELECTRICAL SPECIFICATIONS

MODEL	VOLTS	AMPS 1 ϕ	WATTS	POWER SUPPLY
	50/60Hz 1 ϕ			
WVU-1	208/240V	6A	1.4kW	Ventilator hood requires NEMA 6-15R receptacle. Each cooking appliance requires a circuit sized to the appliance power requirements, connected to an interlock contactor with 208/240 volt control coil rating.

UNDER-HOOD APPLIANCE LIMITATIONS:

1. Appliance Maximum output of 22Kw
2. Cooking surface must be 34-38" (864—965mm) from floor, no more than 25.5" (648mm) from back wall, no wider than 24" (610mm)
3. Appliance must be installed per manufactures instructions.
4. Electrical appliance only. Not Intended for gas fired units.

FEATURES & OPERATING CONTROLS



Universal Ventless Hood Features & Operating Controls

M521 p/n 2M-Z17085 OpM WVU- Universal Hood

IL1825 Rev.-

PRECAUTIONS AND GENERAL INFORMATION

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

This ventilator is intended for commercial establishments for use in the preparation 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.

This unit is intended for use with light- and medium duty electric cooking appliances only. Cooking appliances placed under this ventilator must comply with the restrictions set forth in the *Installation Instructions* included in the literature package shipped with the unit.

Also see *Under Hood Cooking Appliance Limitations*, page 1.

Do not connect or energize this appliance until all installation instructions are read and followed. Damage to the ventilator and/or cooking appliances may result if these instructions are not followed. Disconnect this appliance from electrical power before performing any maintenance or servicing.

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.

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 attempt to wash filter packs. Water will cause their immediate failure and disable the ventilator.

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

Avoid storing flammable or combustible materials in, on or near the ventilator or associated cooking 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.

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.



DANGER: **SUFFOCATION HAZARD**

Do not attempt to use this ventilator with gas-fired units. This ventilator will not remove products of combustion. Unvented exhaust gasses can be deadly.



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.

IMPORTANT:

The ventilator is disabled when the filters are plugged to the point of insufficient airflow for proper operation. Also, power to the cooking appliances is interrupted if either the filter pack or the grease baffle is removed.

It is the responsibility of the store management to maintain sufficient spares of filter packs to avoid prolonged shutdown of the ventilator when this filter pack is expended. Filter packs cannot be cleaned.

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

AGENCY LISTING INFORMATION



STD 4



UL710B

Recirculating System

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

This appliance is ETL listed.

INSTALLATION

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® distributor. Ventilator will not operate and cooking appliance will not be energized until the Ansul® fire suppression system has been charged.

IMPORTANT:

After cooking appliances are positioned under the hood, swivel nozzles must be positioned per Ansul® recommendations.

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 and the *Installation Instruction Sheet* packed with the appliance before starting any installation.

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

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

COMPONENTS

Per module:

- 1 ea. Grease baffle
- 1 ea. Filter pack
- 1 ea Grease cup

Ansul® components - must be installed by an authorized ANSUL® distributor only:

- 1 ea. Fire suppression agent tank
- 1 ea. Fire suppression agent (Ansulex® Low pH) 1.5 gal.
- 1 ea. Fire suppression system charging cartridge

Store these components in a convenient place for later use.

INSTALLATION (continued)

SERVICE TECHNICIAN INSTALLATION NOTES

This ventilator hood is to be used with light-duty and medium-duty electrically powered cooking appliances only.

- DO NOT attempt to use this ventilator hood with gas-fired units.
- DO NOT use this ventilator hood with electrical appliances whose dimensions or wattage characteristics exceed those defined in the Under Hood Cooking Appliance Limitations, page 1.

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

Ansul® Installer must complete the WARRANTY INITIATION form (2M-303912) included with the unit for the warranty to begin, and record installation particulars on the CUSTOMER SERVICE DATA form located at the end of this manual.

IT IS THE RESPONSIBILITY OF THE INSTALLER TO verify that this 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).

NOTE: Certain codes require FRYERS to be restrained with a TETHER or other RESTRAINT DEVICE. If this ventilator is to be used with a fryer, 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 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. Unit requires a minimum of 96" (floor to overhead) to allow for adequate air circulation and replacement of filters. Combustible object from the top must be 99" or higher, or 3" above the unit while the control panel door is open.

Verify that the unit sits firmly on all legs or casters depending on your model. 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 or deflection, legs must be adjusted such that all legs are in firm contact with the floor.

Refer to the *General Layout Data* for required clearances (contact Wells Technical Services "service@wells-bloomfield.com"). Maintain required clearances between the appliance and adjacent combustible surfaces.



DANGER: SUFFOCATION HAZARD

Do not attempt to use this ventilator with gas-fired units. This ventilator will not remove products of combustion. Unvented exhaust gasses can be deadly.



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, ventilator cannot be moved without first disabling the remote pull station.

Contact your Ansul® agent for details.

INSTALLATION



DANGER: **SUFFOCATION HAZARD**

Do not attempt to use this ventilator with gas-fired units. This ventilator will not remove products of combustion. Unvented exhaust gasses can be deadly.



WARNING **SHOCK HAZARD**

Electrical connections must be made by a licensed electrician.



CAUTION: **FIRE HAZARD** **HEALTH HAZARD**

The cooking appliance must be connected to the cooking appliance contactor, the control circuit of which is controlled by the ventilator.

Failure to control cooking appliances will provide no protection in the event of a fire, nor will cooking vapors and odors be contained in the event of ventilator hood malfunction.



CAUTION: **SHOCK HAZARD**

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

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.

ELECTRICAL INSTALLATION

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

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

Remove the lower rear panel to access the cooking appliance contactor and building alarm relay. Remove the appropriate knockout, then wire the cooking appliance to the LOAD side of the contactor.

NOTE: If the provided power cord is not used, it is the responsibility of the electrical contractor to provide suitable wiring, flexible or rigid conduit, and an appropriate strain relief.

The cooking appliance under the ventilator hood must be connected to the LOAD side of the cooking appliance contactor, located in the electrical connection box. The contactor functions control the cooking appliance in the event of ventilator malfunction or appliance fire.

The ventilator provides a dry contact relay connection for a building fire management system. This pilot-duty relay may be required by local fire codes, however, Wells Bloomfield strongly recommends that such system be properly utilized in any case.

The alarm relay is activated by the Ansul® fire detection system. If the installation includes a building alarm system, connect to either the N.O. or N.C. contacts of the relay (as required by the building alarm system).

The ventilator will operate properly, and the control relay will be energized, only when:

1. The VENTILATOR POWER SWITCH is "ON".
2. The Ansul® Fire Suppression System is charged and armed.
3. The grease baffle and filter pack are in position and serviceable, and the ventilator pressure sensing system is satisfied.

INSTALLATION

FIRE SUPPRESSION SYSTEM INSTALLATION

FIRE SUPPRESSION SYSTEM is comprised of a container of Ansul® Low pH liquid fire suppression media and a system pressurization canister for each module, plus associated plumbing. Actuation controls are contained in the Automan enclosure.

Two FUSIBLE LINKS are utilized for automatic actuation of the fire suppression system. Additionally, the hood is supplied with a field installed MANUAL PULL STATION, which must be set-up at the time of installation by an authorized Ansul® distributor.

The MANUAL PULL STATION allows for manual emergency shutdown of cooking appliance power, and actuation of the fire suppression system.

Three NOZZLES disperse the fire suppression media. Two inner nozzles protect the fan and plenum. The third, front mounted, nozzle is swivel mounted, and must be directed toward the cooking surface of the installed cooking appliance.

If the ventilator is situated such that the supplied manual pull station cannot be installed or is not readily accessible, 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, cooking appliance contactor and building fire alarm relay are de-energized; and, the fire suppression media discharged. Fire suppression media will form an emulsion designed to both smother and cool the fuels in/on the cooking appliance.



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 unit 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 ventilator for any reason may cause the Ansul® system to discharge.

IMPORTANT:

Should the fire suppression system discharge: all nozzles must be replaced, and all lines thoroughly cleaned, prior to recharging the system.

Residual fire suppression media may compromise the flow and dispersion of fire suppression media in any subsequent activation.

INSTALLATION

DANGER DANGER BURN HAZARD

Any additional remote pull station must **NOT** be installed on the front of the cooking appliances, nor forward of the ventilator side panels.

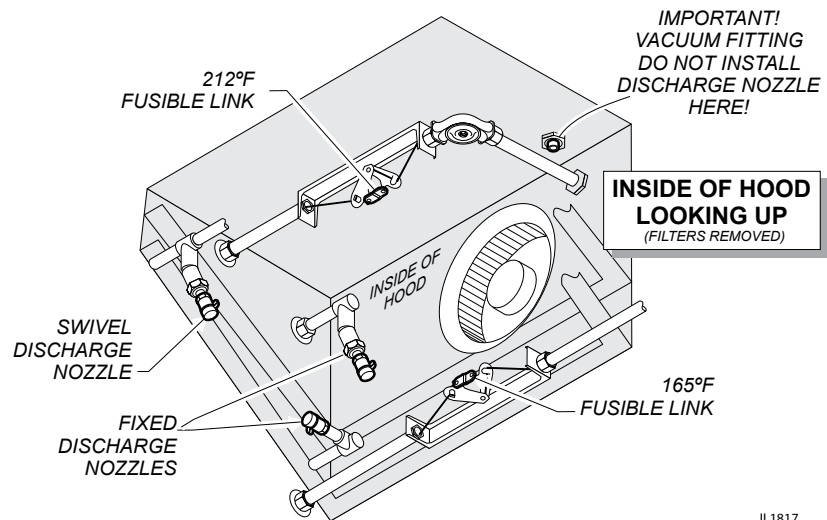
Discharge of the fire extinguishing system into hot grease or oil may cause hot foam to spill over from the cooking surface or frypot.

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

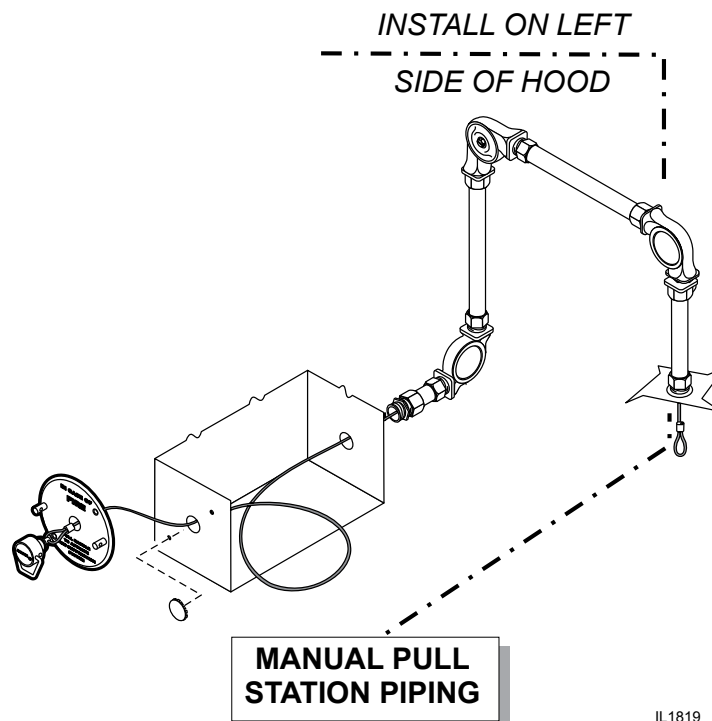
Manual pull station is factory installed on the left side (facing the unit). It may, however, be relocated to the right side of the ventilator hood by an authorized Ansul® agent. Standard practice recommends that the manual pull station be located on the side toward an exit.

FIRE SUPPRESSION SYSTEM INSTALLATION (continued)

Two fusible links are used to detect fire. One (165°F) is located between the grease baffle and filter pack, and is for protection from a cooking appliance fire. The other (212°F) 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 all nozzles, disable the cooking appliance and cause a buzzer to sound.



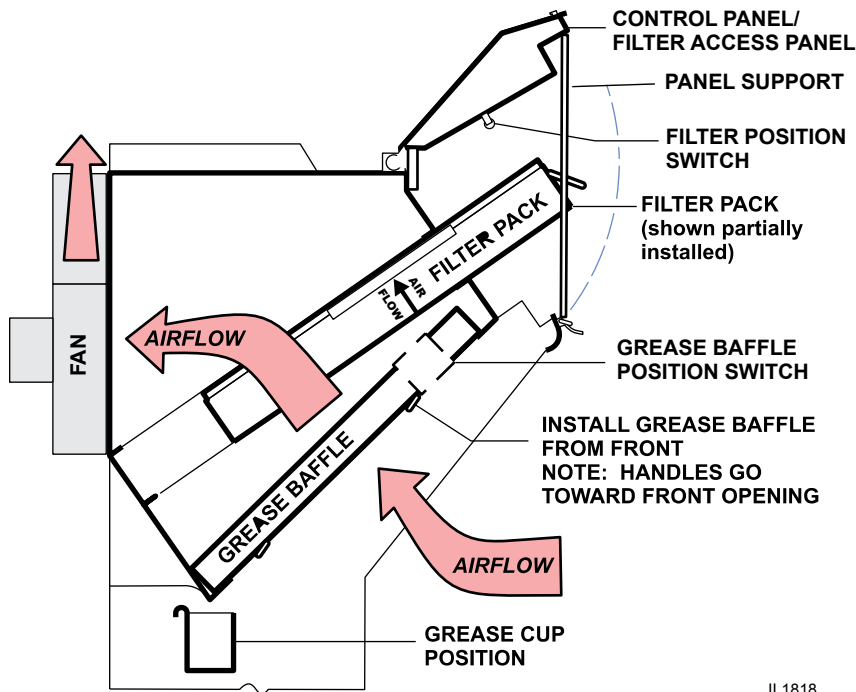
The MANUAL PULL STATION and any similar REMOTE MANUAL PULL STATION will activate the fire suppression system when the ring on the pull station is pulled to its full extent.



INSTALLATION

FILTER INSTALLATION

1. Release two catches holding control panel/filter access panel. Lift the panel and raise the Prop Panel Rod to support and secure the panel in the raised position.
2. Note air flow direction arrow on filter pack. Remove old filter pack and slide new filter pack fully into the appropriate slot. Verify that the airflow arrow points toward the fan.
Use the provided handle to raise and lower the filter pack.
3. Raise the panel and put the Prop Panel Rod back to its lowered position, then lower the panel and secure the catches.



GREASE BAFFLE and GREASE CUP INSTALLATION

1. Install grease baffle from front. Engage the baffle in the retainer slot. Push up until the baffle bottom clears the lower lip of the retainer, then lower the baffle into the bottom retainer
2. Install GREASE CUP into brackets below grease baffle.
3. Install CONDENSATION CUP in brackets at bottom skirt of hood.

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

NOTE:

The GREASE BAFFLE and FILTER PACK actuate position switches when they are properly positioned. They must be properly installed for the under hood cooking and appliance contactor to be energized.



WARNING SLIP AND FALL HAZARD

DO NOT operate any grease-producing cooking appliance

(e.g. fryer or griddle) unless the grease cup is properly installed. Oil will drip onto floor creating a slipping hazard.



CAUTION BURN HAZARD

DO NOT operate any cooking appliance unless the grease cup is installed.

Moisture dripping onto hot surfaces, oil or grease can cause splattering.



CAUTION SLIP AND FALL HAZARD

DO NOT operate any cooking appliance unless the condensate cup is installed.

Moisture dripping onto floor can cause a slip and fall hazard.

OPERATION



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:

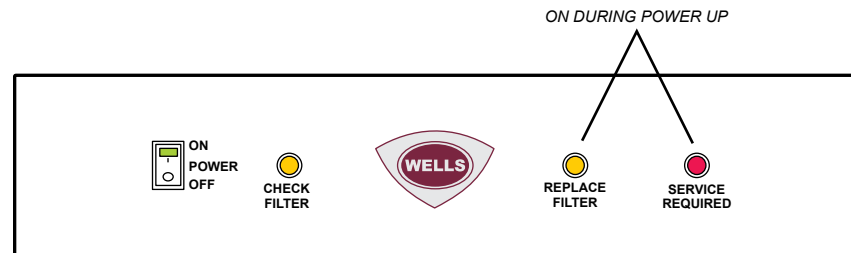
The ventilator and cooking appliance control relay are disabled when REPLACE FILTERS light is illuminated. Note that the ventilator cannot operate if the filter pack is removed.

It is the responsibility of the store management to maintain sufficient spares of filter packs to avoid prolonged shutdown of the ventilator when this filter is expended.

Filter packs cannot be cleaned.

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

Control Panel



IL1820

NOTE: Cooking appliances must be operated in accordance with the manufacturer's instructions.

During normal operation, VENTILATOR POWER ON (illuminated power switch) will be the only light on the control panel that will be ON, when the unit is operating properly.

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

If REPLACE FILTER light illuminates, replace FILTER PACK.

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

If SERVICE REQUIRED light illuminates, filter pack is restricted to the point of insufficient airflow for proper operation. Ventilator is shut down until the underlying clogged filter situation has been corrected. Replace clogged item with a fresh filter pack to correct the condition. Reset the unit by turning VENTILATOR POWER SWITCH to OFF, then back to ON.

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

Operation Lights

There are two equipment lights that will be on during normal operation.

CLEANING INSTRUCTIONS

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 cooking appliance. Refer to appliance user instructions for cleaning procedure.



CAUTION: HOT SURFACE

Exposed surfaces can be hot to the touch and may cause burns. Allow unit to cool before cleaning.



CAUTION: SHOCK HAZARD

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

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

Procedure is complete

CLEANING INSTRUCTIONS



CAUTION: HOT SURFACE

Exposed surfaces can be hot to the touch and may cause burns. Allow unit to cool before cleaning.

PRECAUTIONS: Disconnect unit from electric power and allow to cool. Cover cooking surfaces and frypots to prevent contamination.

FREQUENCY: Monthly

TOOLS: Mild detergent, clean non-abrasive towels



CAUTION: SHOCK HAZARD

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

NOTE: Ventilator section to be cleaned in conjunction with cooking appliance. Refer to appliance user instructions for cleaning procedure.

IMPORTANT:

DO NOT wash FILTER PACK. Washing these filters will clog them, and cause installed cooking appliance to be disabled.

IMPORTANT:

DO NOT clean interior of ventilator by spraying.

Spraying can contaminate the cooking appliance, and may cause internal damage to the ventilator blower, operation proofing system and/or fire suppression system.

Clean by wiping only.

1. Disconnect unit from electric power and allow to cool. Cover cooking appliance to prevent oil contamination.
2. Remove GREASE BAFFLE, GREASE CUP, CONDENSATE CUP and FILTER PACK.
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 FILTER PACK, GREASE BAFFLE, GREASE CUP and CONDENSATE CUP.
5. Uncover the cooking appliance and reconnect unit to electric power.

Procedure is complete

REQUIRED MAINTENANCE

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).

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 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.

IMPORTANT:

Per NFPS 96, a signed and dated VENTILATOR HOOD MAINTENANCE LOG must be maintained on the premises, and be made available for inspection by the authority having jurisdiction upon request.

IMPORTANT:

Should the fire suppression system discharge, all lines and nozzles must be thoroughly cleaned prior to recharging the system.

Be sure to note such cleaning on the hood maintenance log. Residual fire suppression media may compromise the flow and dispersion of fire suppression media in any subsequent activation.

Inspection shall be conducted on a monthly basis in accordance with the manufacturer's Operation Manual. At a minimum, this inspection shall include verification of the following:

WELLS BLOOMFIELD, LLC
VENTILATOR HOOD OWNERS MONTHLY INSPECTION LOG

OPERATION	AGENT / DATE												
Extinguishing system components: In proper place and (visually) in good order													
Manual pull station actuators for fire suppression system are unobstructed													
The maintenance log is in place and up to date													
No obvious physical damage or condition exists that might prevent operation of the fire suppression system													
The nozzle blow-off caps are in place and in good condition													
The hood, duct and protected cooking appliance have not been replaced, modified or relocated													
Clean plenum GREASE BAFFLE and BLOWER (max. interval: 3 months)													
Change PRE-FILTER and FILTER PACK (as required)													

IL-2144

This MAINTENANCE LOG is to be performed and completed by a trained technician who has completed the instruction necessary to perform the maintenance and recharge service.

WELLS BLOOMFIELD, LLC
VENTILATOR HOOD MAINTENANCE LOG

OPERATION		AGENT / DATE																					
Clean and inspect discharge nozzle in plenum BEFORE filters Max. interval: 6 months																							
Clean and inspect discharge nozzle in plenum AFTER filters Max. interval: 6 months																							
Inspect fire suppression fuse links, all releasing devices for actuation, fire suppressant tank liquid level Max interval: 6 months (discharge of fire suppressant not a part of this test)																							
Inspect fire suppression hoses, plumbing and tank for obstructions and any conditions such as, but not limited to, corrosion and pitting. Max. interval: 6 months																							
Inspect and test all filter interlocks Max. interval: 6 months																							
Replace two (2) fire suppression links at cooking appliance: each link is rated @ 165°F Max interval: 12 months	Log TEMP																						
	Log Mfg DATE Stamp																						
Replace fire damper fusible link: rated @ 280°F Max interval: 12 months	Log TEMP																						
	Log Mfg DATE Stamp																						

THIS MAINTENANCE LOG MUST BE KEPT IN A PROTECTIVE COVER PERMANENTLY ATTACHED TO THE APPLIANCE
 Log all repairs and recommendations on reverse side. Any repairs, other than replacement of factory authorized parts, to the fire suppression plumbing system must be subject to hydrostatic pressure testing.

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 ₅₀ (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 ₂ 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
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 ₃ , 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 ₅₀ (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

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

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

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

M521 p/n 2M-Z17085 Opm WVU- Universal Hood

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	Filter pack or grease baffle not in position	Properly install filter pack and grease baffle
REPLACE FILTER light lit	Filter pack nearing end of service life	Arrange to replace filter pack in a timely manner
SERVICE REQUIRED light lit (cooking appliance not operating)	Filter pack plugged	Replace filter pack
	Fire damper in exhaust collar has closed	Contact an authorized Wells service agent for repairs
	One or more vacuum sensing lines or ports plugged, or sensing line dislodged.	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 under-hood appliance (s) will be de-energized. Press VENTILATOR POWER SWITCH to <i>OFF</i> , then back to <i>ON</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:

- 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.

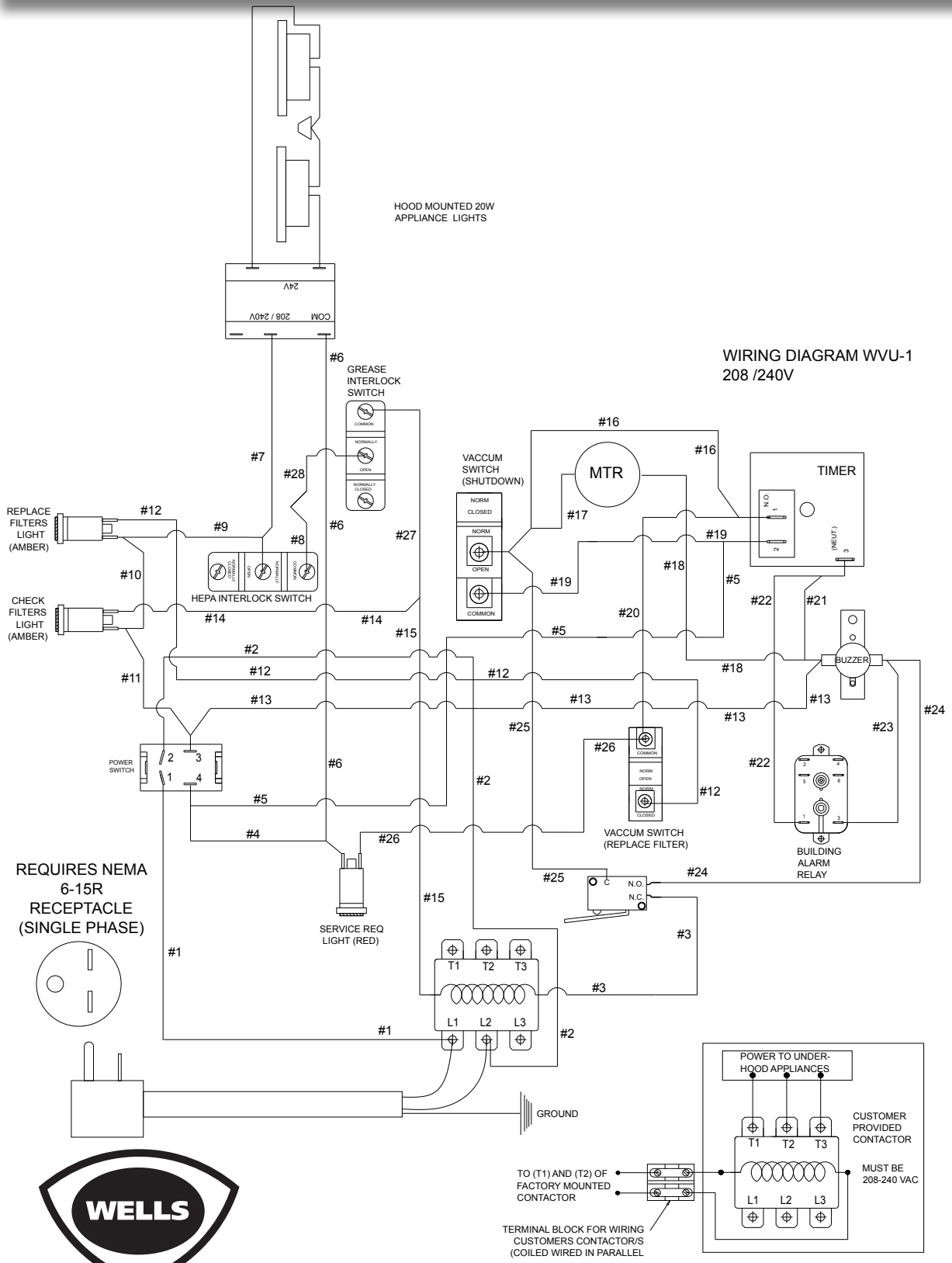
Procedures for servicing fire suppression equipment are described in:

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.

WIRING DIAGRAM



WIRING DIAGRAM WVU-1
208 /240V

WIRING DIAGRAM WVU-1
208 /240V

W.D. # 2M-Z13556
DATE 6-11-13 REV-B

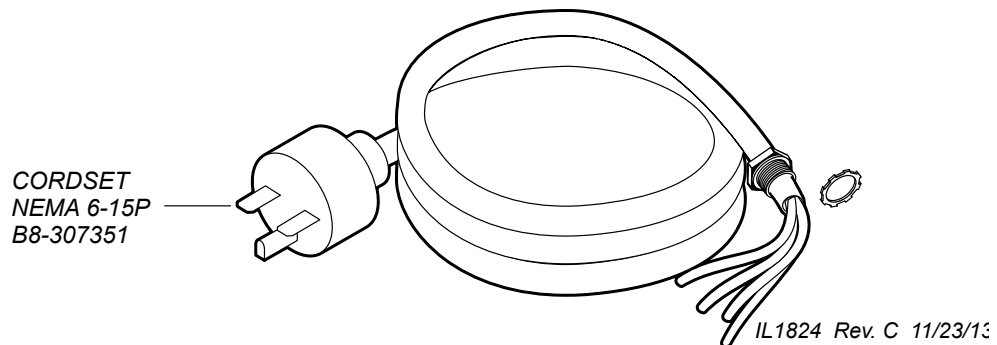
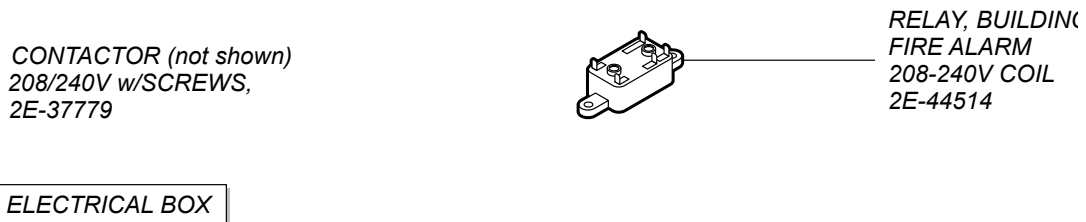
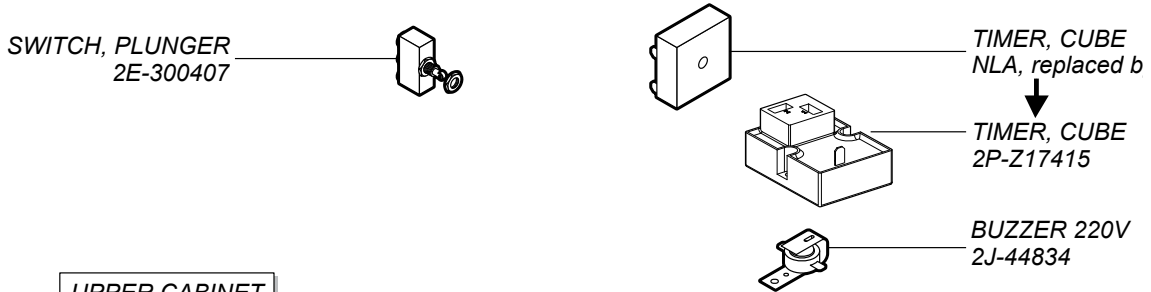
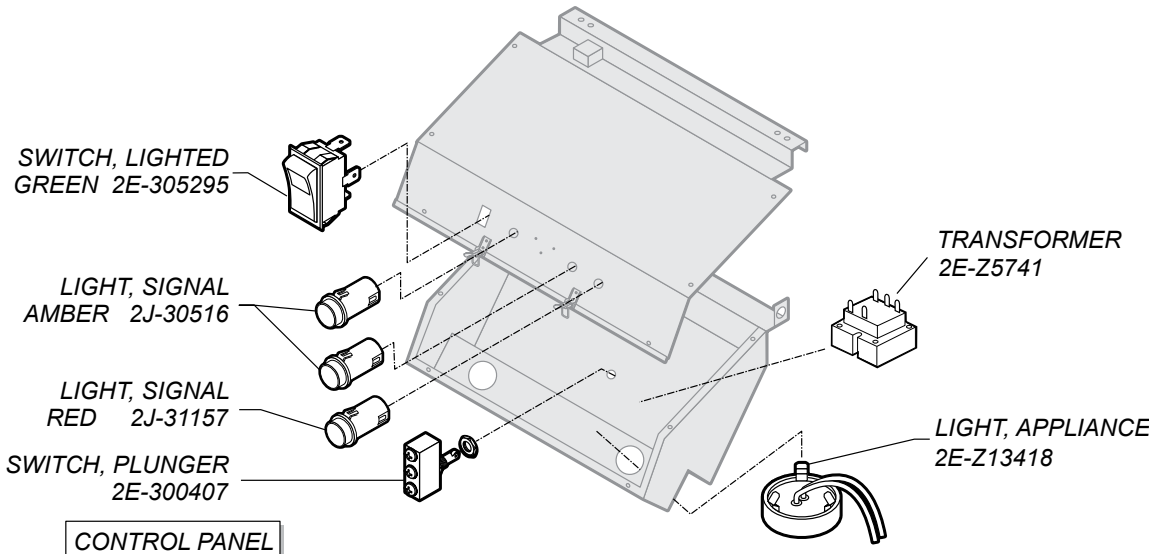
REV. (B) P/N 2M-Z13556

M521 p/n 2M-Z17085 OpM WVU- Universal Hood



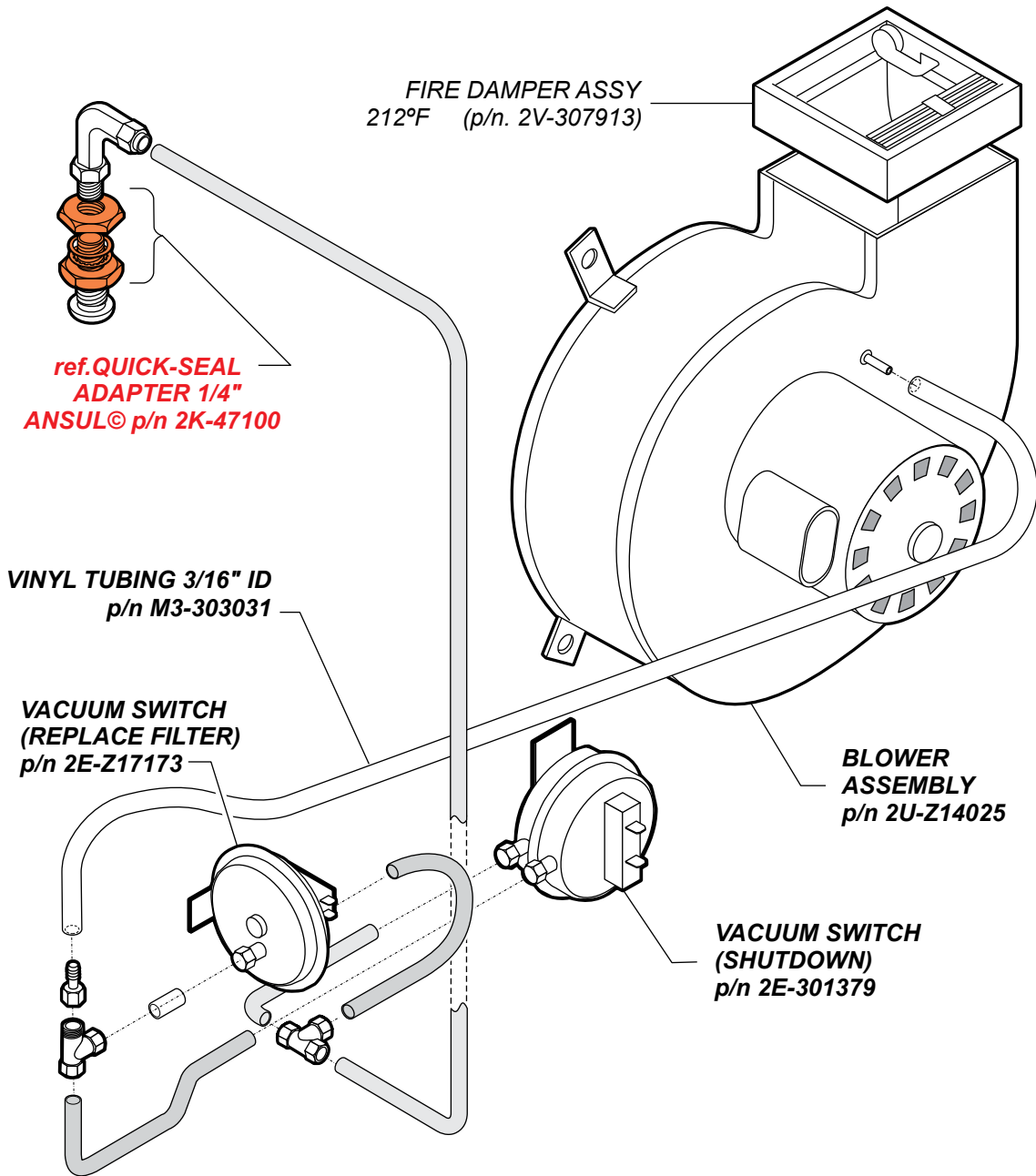
EXPLODED VIEW & PARTS LIST

ELECTRICAL COMPONENTS

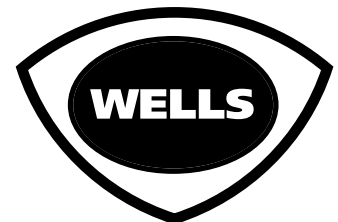


EXPLODED VIEW & PARTS LIST

VACUUM SYSTEM COMPONENTS



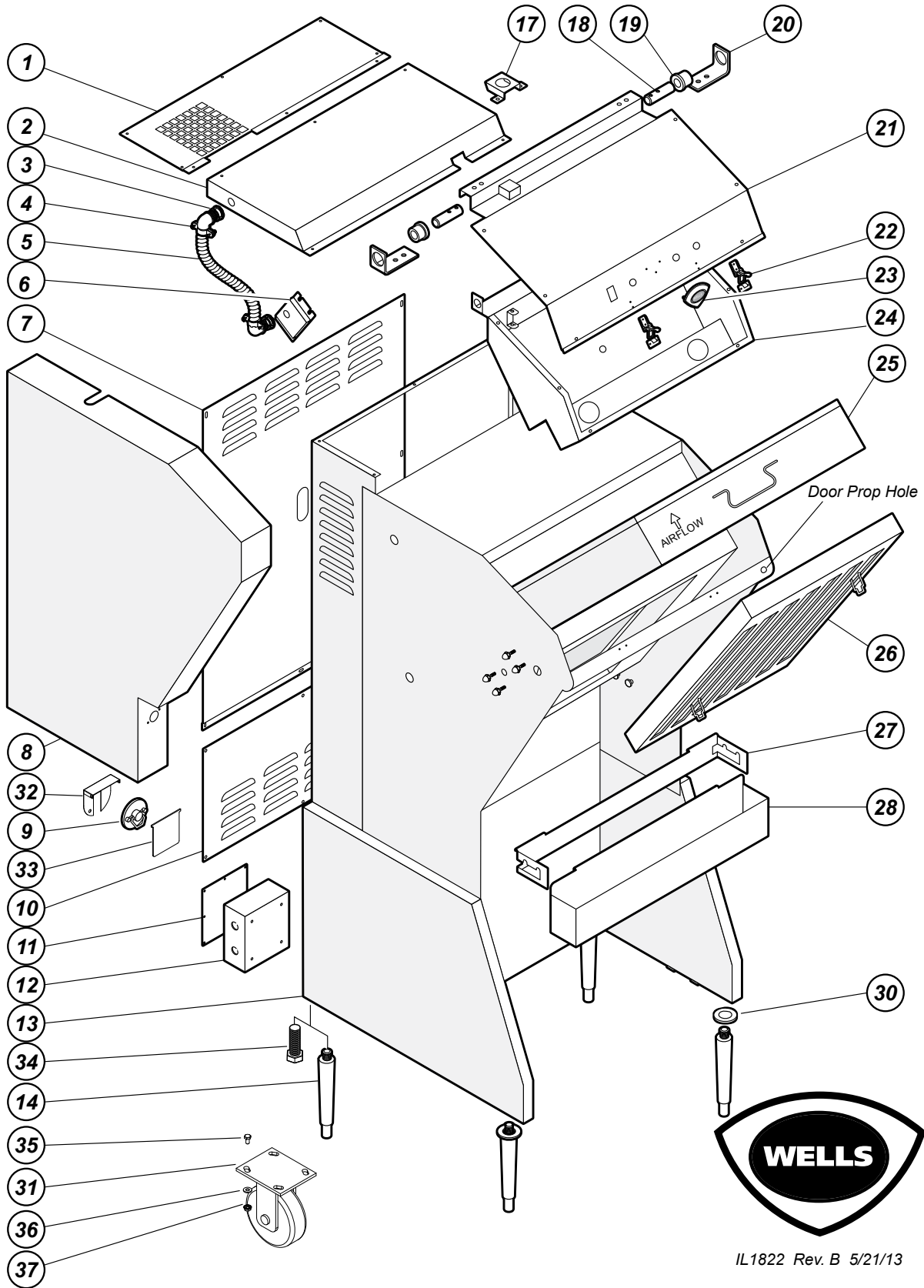
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IL1823 Rev. D 8/30/13

EXPLODED VIEW: WVU-1,

CABINET COMPONENTS



IL1822 Rev. B 5/21/13

M521 p/n 2M-Z17085 OpM WVU- Universal Hood

PARTS LIST: WVU-1, WVU-1P

CABINET COMPONENTS

WVU-1 CABINET COMPONENTS			
ITEM	PART NO.	DESCRIPTION	Application
1	N1-WL0397	PANEL, EXHAUST TOP	
2	N1-Z17013	PANEL, TOP ELECTRICAL COVER	
3	2I-Z12311	WASHER, FIBER	
4	2K-34136X	FITTING, CONDUIT 90°	
5		CONDUIT	
6	N1-Z13464	COVER, GREASE BAFFLE POSITION SWITCH	
7	N1-Z17017	COVER, REAR UPPER	
8	N1-Z13495	COVER, LEFT SIDE PANEL	
9	2O-308131	ANSUL® MANUAL PULL STATION	
10	N1-Z13456	COVER, REAR LOWER	
11	N1-Z13455	COVER, ELECTRICAL BOX	
12	N1-Z13454	OUTLET BOX, ELECTRICAL	
13		CABINET (reference)	
14	2A-307628	LEG, ADJUSTABLE 6" METAL (set of 4)	
17	N1-Z13472	GUIDE, WIRING	
18	2A-305610	PIN, PIVOT	
19	2K-305619	BUSHING, PIVOT	
20	N1-Z13471	BRACKET, PIVOT	
21	N1-WL0395	COVER, CONTROL PANEL ASSY	
22	2C-307939	LATCH ASSEMBLY, CONTROL PANEL	
23	2M-306719	TRADEMARK, DIECAST	
24	N1-WL0396	BASE, CONTROL PANEL, BOTTOM ASSY	
25	N1-307923	FILTER PACK	
26	2I-Z19216	GREASE BAFFLE	
27	N1-Z17020	BRACKET, GREASE TRAY	
28	N1-Z13496	GREASE TRAY	
30	N1-Z13526	WASHER, FRONT LEG SEAL	
31	2P-303417	CASTER	WVU-1P
32	N1-Z17022	COVER BRACKET, PULL STATION	WVU-1P
33	2L-Z17023	PULL STATION COVER CLEAR	WVU-1P
34	2C-20104-24	SCREW HXHDCAP 1/2-13X1-12	WVU-1P
35	2C-Y1221	BOLT 1/4-20X1/2 HEX STL	WVU-1P
36	2C-Z5556	WASHER, FLAT 1/4 SS	WVU-1P
37	2C-6517	NUT 1/4-20 HEX STL NP	WVU-1P
not shown	2M-Z13447	DECAL, CONTROL PANEL	
not shown	2B-308146	PROP, CONTROL PANEL	

ANSUL® 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

ref. ADAPTER QUICK-SEAL 3/8"
 ANSUL® p/n 77284 (typical)

ref. NOZZLE 1W
 ANSUL® p/n 419336

FUSIBLE LINK 212°F
 p/n 2E-303037

ref. NOZZLE 1W
 ANSUL®
 p/n 419336

ref. CABLE
 WIRE ROPE
 ANSUL®
 p/n 15821

ref. SWIVEL ASSY.
 ANSUL® p/n 418569

ref. NOZZLE 3N
 ANSUL® p/n 419338

ref. PULLEY ELBOW
 ANSUL® p/n 423250
 (typical)

MANUAL PULL STATION
 p/n 20-301389

FUSIBLE LINK 165°F
 p/n 2E-302583

ref. MOUNTING BRACKET
 and RELEASE MECHANISM
 R-102 ANSUL® p/n 79493

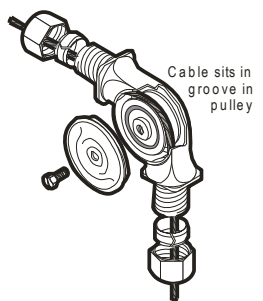
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CARTRIDGE LT-20-R
 ANSUL® p/n 20-47099

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MICROSWITCH p/n 2E-47273
TERM BLOCK p/n 2E-33068

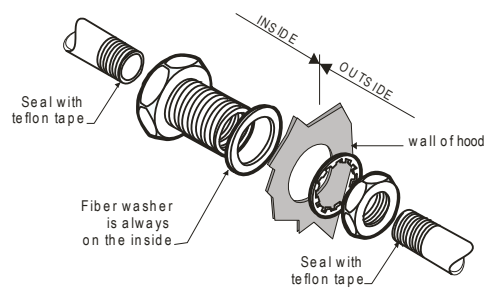
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 ANSUL® p/n 429864

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**ANSULEX™ EXTINGUISHING
 AGENT 1.5 GAL.**
 ANSUL® p/n 79694

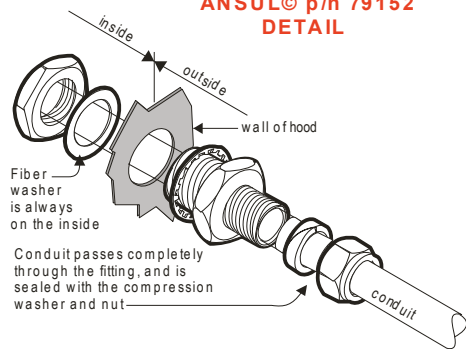
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**ANSUL® p/n 77284
 DETAIL**



**ANSUL® p/n 79152
 DETAIL**



IL1821, Rev. A 6/08/10

M521 p/n 2M-Z17085 OpM WVU- Universal Hood

PARTS & SERVICE

DESCRIPTION

FILTER PACK

PART NO.

N1-307923

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



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