

Service Manual



This manual is to be used by qualified appliance technicians only. Viking does not assume any responsibility for property damage or personal injury for improper service procedures done by an unqualified person.



This Base Manual covers general and specific information including, but not limited to the following models:

DCH3042

DCH3642

DWH3006

DWH3606



SAVE THESE INSTRUCTIONS

REVIEW ALL SERVICE INFORMATION IN THE APPROPRIATE SERVICE MANUAL AND TECHNICAL SHEETS BEFORE BEGINNING REPAIRS.




Pride and workmanship go into every product to provide our customers with quality appliances. It is possible, however, that during the lifetime of a product service maybe require. Products should be serviced only by a qualified authorized service technician who is familiar with the safety procedures required to perform the repair and is equipped with the proper tools, parts, testing instruments, and the appropriate service manual.

Safety Information

We have provided many important safety messages throughout this manual and on the product. Always read and obey all safety statements. To properly identify a safety statements look for the following safety alert symbol.




This symbol alerts personnel to hazards that can many different types of altering messages. All safety messages will be preceded by a safety alert symbol and the word "DANGER", "WARNING" or "CAUTION".

 DANGER
Immediate hazards which WILL result in severe personal injury or death.
 WARNING
Hazards or unsafe practices which COULD result in severe personal injury or death.
 CAUTION
Hazards or unsafe practices which COULD result in minor personal injury, product or property damage.

All safety messages will identify the hazard, tell you how to reduce the chance of injury, and inform you what can happen if the instructions are not followed.

 WARNING
To avoid risk of serious injury or death, repairs should not be attempted by unauthorized personnel.

 CAUTION
VIKING will not be responsible for any injury or property damage from improper service procedures. If performing service on your own product, you must assume responsibility for any personal injury or property damage which may result.

To locate an authorized service agent, call:

Viking Customer Service
Phone No. 1-888-845-4641

Address your written correspondence to:

Viking Preferred Service
1803 HWY 82 West
Greenwood, MS 38930

Designer Hood Warranty

ONE YEAR FULL WARRANTY

Built-in hoods/ventilators and all of their component parts, except as detailed below*, are warranted to be free from defective materials or workmanship in normal household use for a period of twelve (12) months from the date of purchase. NOTE: Viking Range ventilator kits are designed specifically for use with Viking Range hoods. Use of any non-Viking Range ventilator kits VOIDS the hood warranty. Viking Range Corporation, warrantor, agrees to repair or replace, at its option, any part which fails or is found to be defective during the warranty period. The Viking warranty does not cover any additional ventilation products used in conjunction with Viking hoods or ventilator kits. This includes, but is not limited to, such devices as booster fans or in-line blowers. Any malfunction caused to Viking ventilation products as a direct result of the use of such equipment is not covered under the Viking warranty.

*Glass (including light bulbs), painted, and decorative items are warranted to be free from defective materials or workmanship for a period of ninety (90) days from the date of original retail purchase. ANY DEFECTS MUST BE REPORTED TO THE SELLING DEALER WITHIN NINETY (90) DAYS FROM DATE OF ORIGINAL RETAIL PURCHASE. Viking Range Corporation uses the most up-to-date processes and best materials available to produce all color finishes. However, slight color variation may be noticed because of the inherent differences in painted parts and porcelain parts as well as differences in kitchen lighting, product locations, and other factors.

FIVE YEAR LIMITED WARRANTY

Any hood blower motor which fails due to defective materials or workmanship in normal household use during the second year through the fifth year from the date of original retail purchase will be repaired or replaced, free of charge for the part itself, with the owner paying all other costs, including labor.

NINETY (90) DAY RESIDENTIAL PLUS WARRANTY

This warranty applies to applications where use of the product extends beyond normal residential use. Examples are, but not limited to, bed and breakfasts, fire stations, private clubs, churches, etc. This warranty excludes all commercial locations such as restaurants, food service locations and institutional food service locations.

This warranty extends to the original purchaser of the product warranted hereunder and to each transferee owner of the product during the term of warranty.

This warranty shall apply to products purchased and located in the United States and Canada. Products must be purchased in the country where service is requested. Warranty labor shall be performed by an authorized Viking Range Corporation service agency or representative. Warranty shall not apply to damage resulting from abuse, accident, natural disaster, loss of electrical power to the product by anyone other than an authorized Viking Range Corporation service agency or representative. This warranty does not apply to commercial usage. Warrantor is not responsible for consequential or incidental damage whether arising out of breach of warranty, breach of contract, or otherwise. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Owner shall be responsible for proper installation, providing normal care and maintenance, providing proof of purchase upon request, and making the appliance reasonably accessible for service. If the product or one of its component parts contains a defect or malfunction during the warranty period, after a reasonable number of attempts by the warrantor to remedy the defects or malfunctions, the owner is entitled to either a refund or replacement of the product or its component part or parts. Replacement of a component part includes its free installation. Warrantor's liability on any claim of any kind, with respect to the goods or services covered hereunder, shall in no case exceed the price of the goods or service or part thereof which gives rise to the claim.

Specifications subject to change without notice.

Professional Hood Warranty

ONE YEAR FULL WARRANTY

Built-in hoods/ventilators and all of their component parts, except as detailed below*, are warranted to be free from defective materials or workmanship in normal household use for a period of twelve (12) months from the date of purchase. NOTE: Viking Range ventilator kits are designed specifically for use with Viking Range hoods. Use of any non-Viking Range ventilator kits VOIDS the hood warranty. Viking Range Corporation, warrantor, agrees to repair or replace, at its option, any part which fails or is found to be defective during the warranty period.

*Glass (including light bulbs), painted, and decorative items are warranted to be free from defective materials or workmanship for a period of ninety (90) days from the date of original retail purchase. ANY DEFECTS MUST BE REPORTED TO THE SELLING DEALER WITHIN NINETY (90) DAYS FROM DATE OF ORIGINAL RETAIL PURCHASE.

Viking Range Corporation uses the most up-to-date processes and best materials available to produce all color finishes. However, slight color variation may be noticed because of the inherent differences in painted parts and porcelain parts as well as differences in kitchen lighting, product locations, and other factors.

FIVE YEAR LIMITED WARRANTY

Any hood blower motor which fails due to defective materials or workmanship in normal household use during the second year through the fifth year from the date of original retail purchase will be repaired or replaced, free of charge for the part itself, with the owner paying all other costs, including labor.

NINETY (90) DAY RESIDENTIAL PLUS WARRANTY

This warranty extends to the original purchaser of the product warranted hereunder and to each transferee owner of the product during the term of warranty.

This warranty shall apply to products purchased and located in the United States and Canada. Products must be purchased in the country where service is requested. Warranty labor shall be performed by an authorized Viking Range Corporation service agency or representative. Warranty shall not apply to damage resulting from abuse, accident, natural disaster, loss of electrical power to the product by anyone other than an authorized Viking Range Corporation service agency or representative. This warranty does not apply to commercial usage. Warrantor is not responsible for consequential or incidental damage whether arising out of breach of warranty, breach of contract, or otherwise. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Owner shall be responsible for proper installation, providing normal care and maintenance, providing proof of purchase upon request, and making the appliance reasonably accessible for service. If the product or one of its component parts contains a defect or malfunction during the warranty period, after a reasonable number of attempts by the warrantor to remedy the defects or malfunctions, the owner is entitled to either a refund or replacement of the product or its component part or parts. Replacement of a component part includes its free installation. Warrantor's liability on any claim of any kind, with respect to the goods or services covered hereunder, shall in no case exceed the price of the goods or service or part thereof which gives rise to the claim.

Specifications subject to change without notice.

WARRANTY SERVICE

Under the terms of this warranty, service must be performed by a factory authorized Viking Range Corporation service agent or representative. Service will be provided during normal business hours, and labor performed at overtime or premium rates shall not be covered by this warranty. To obtain warranty service, contact the dealer from whom the product was purchased, an authorized Viking Range Corporation service agency, or Viking Range Corporation. Provide model and service number and date of original purchase. For the name of your nearest authorized Viking Range Corporation service agency, call the dealer from whom the product was purchased or Viking Range Corporation. **IMPORTANT:** Retain proof of original purchase to establish warranty period.

The return of the Owner Registration Card is not a condition of warranty coverage. You, however, should return the Owner Registration Card so that Viking Range Corporation can contact you should any question of safety arise which could affect you.

Any implied warranties of merchantability and fitness applicable to the above described hood or ventilator motors are limited in duration to the period of coverage of the applicable express written limited warranties set forth above. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which may vary from jurisdiction to jurisdiction.

Specifications subject to change without notice.

VIKING RANGE CORPORATION
111 Front Street, Greenwood, Mississippi (MS) 38930 USA 662-455-1200

For more product information, call 1-888-VIKING1 (845-4641), or visit our web site at <http://www.vikingrange.com>

Description	Page
Safety Information.....	2
WARRANTY INFORMATION	
Warranty Information Designer Hoods.....	3
Warranty Information Professional Hoods.....	4
Warranty Service Information.....	5
Table of Contents	6

DWH30 – DWH36

GENERAL INFORMATION

Performance Chart	7
Specifications	7

DISASSEMBLY

Component Location	8
Filter and recirculation information	9-10
External Discharge Configuration	10-11
Power Connections.....	11
Component access	12-13

ELECTRICAL

Canopy Light operation	14
Low Speed Fan operation	15
High Speed Fan operation	16
High Speed Thermostat	17
High Temperature Thermostat	18
Wiring Diagram.....	19

PARTS BREAKDOWNS

Filter Assembly - 30"	20
Control Assembly - 30"	21
Exterior Assembly - 30"	22-23
Filter Assembly - 36"	24
Control Assembly - 36"	25
Exterior Assembly - 36"	26-27

Description	Page
-------------	------

DCH30SS – DCH36SS

DISASSEMBLY

Component Location	28
Filter trim removal and power connections	29
Component access – control panel	30
Control panel switch locations	31
Switch and motor removal	32

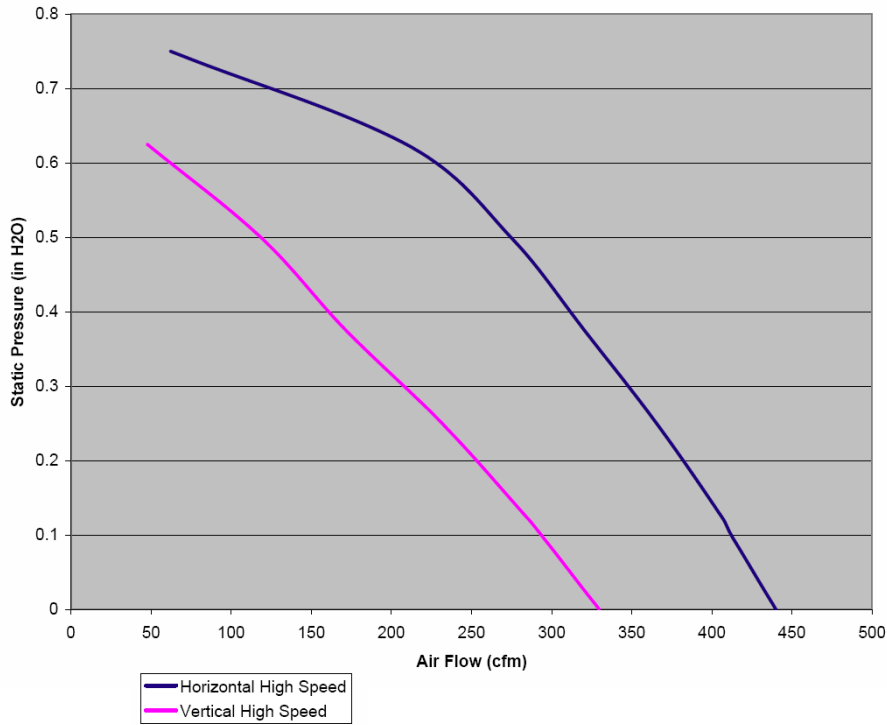
ELECTRICAL

Canopy Light (LOW)	33
Canopy Light (HIGH)	34
Motor operation (LOW)	35
Motor operation (HIGH)	36
High Temperature Thermostat	37
Wiring Diagram.....	38

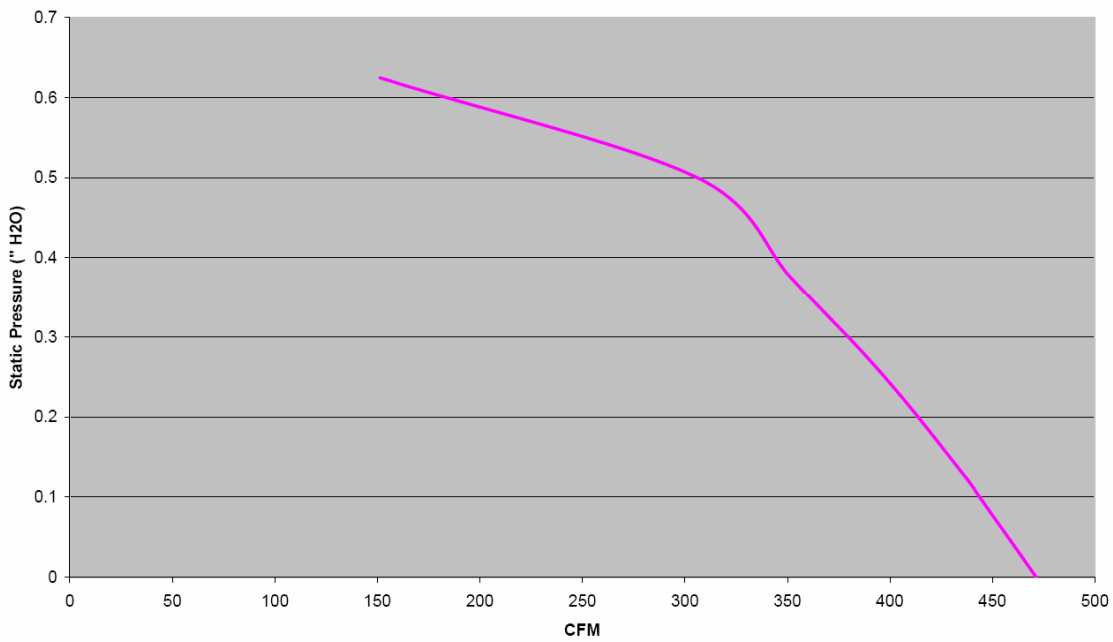
PARTS BREAKDOWNS

Filter Assembly - 30"	39
Control Assembly - 30"	40-41
Exterior Assembly - 30"	42-43
Filter Assembly - 36"	44
Control Assembly - 36"	45-46
Exterior Assembly - 36"	47-48

Performance Chart – DWH30SS – DWH36SS



Performance Chart – DCH30SS – DCH36SS



DWH30 (30") – DWH36 (36") Designer wall hood

The 30 and 36 inch designer wall hoods are designed to operate both in a recirculation mode as well as exterior discharge mode. FIG 1 and 2 below shows the underside of the 30" wall hood

FIG 1

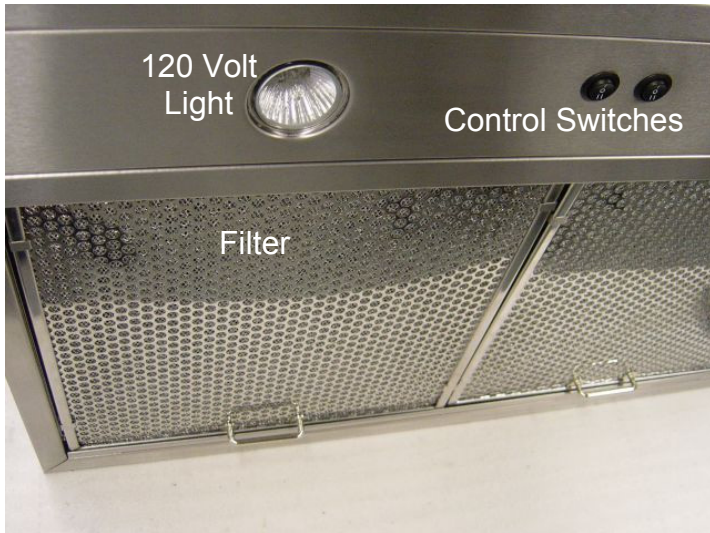
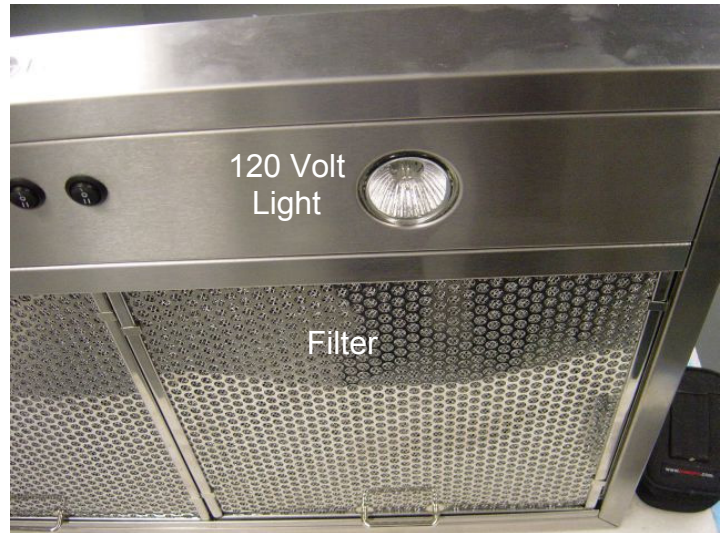


FIG 2



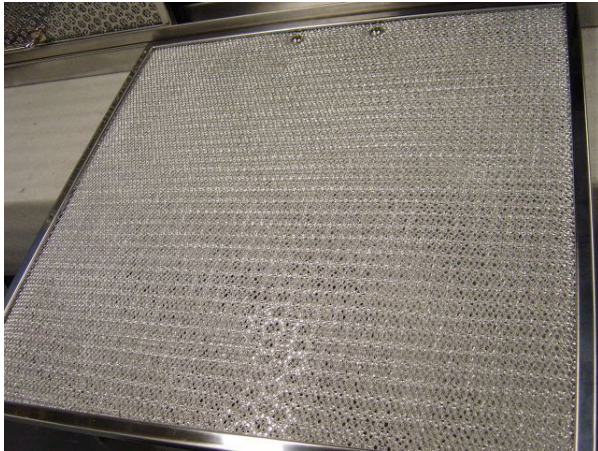
The unit comes with a two-speed dual blower motor and a two level light selection, both controlled by two center mounted rocker switches. Each switch has a center OFF position. FIG 3 shows a close-up of the switches.

FIG 3



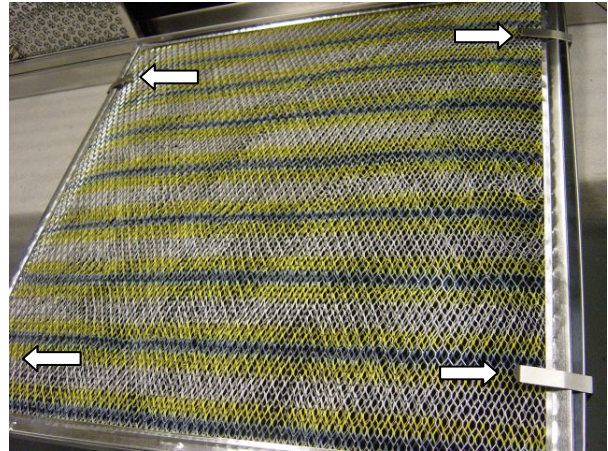
When the hood is installed to operate in recirculation mode, the addition of charcoal filters (supplied in kit) is required. **FIG 4** shows the standard filter used when the hood is installed for exterior discharge.

FIG 4



Standard Filter – Exterior Discharge

FIG 5

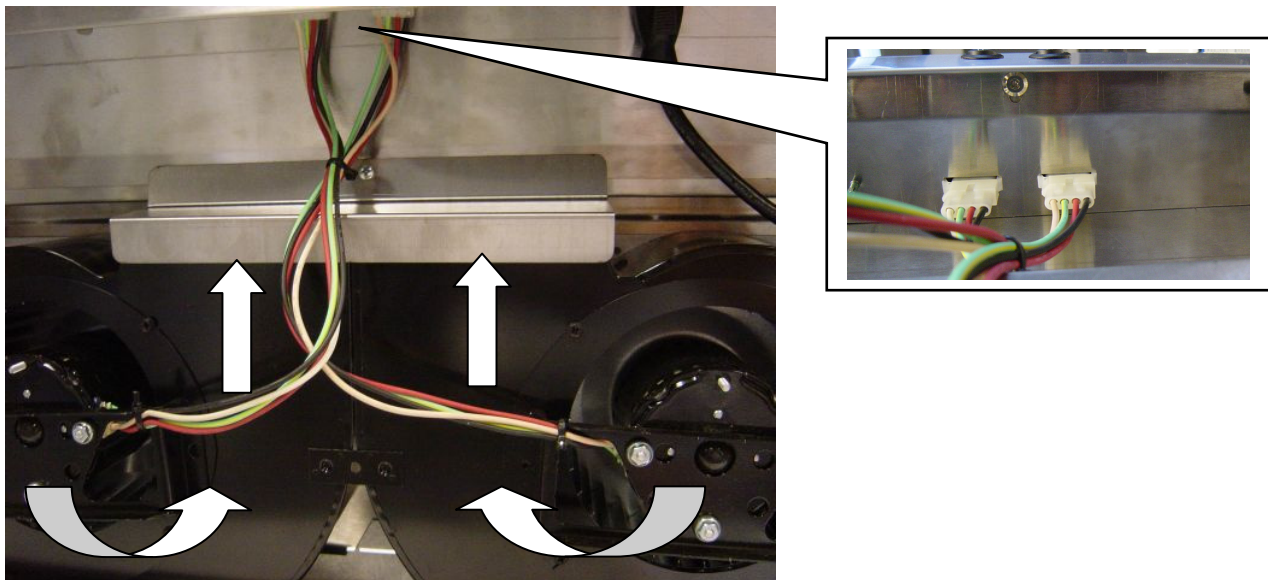


Recirculation – Charcoal Filter Added

The charcoal filter is held in place with four securing clips (Included with charcoal filter) as shown in **FIG 5** above.

Remove filters to access the internal blower motors. **FIG 6** shows that the motor assembly consists of two motors, one which rotates in a Clockwise rotation (Below right) and the other in a counter-clockwise rotation (Below left). Each motor is connected separately to the control housing by the use of a 4-wire Molex disconnect plug (Inset).

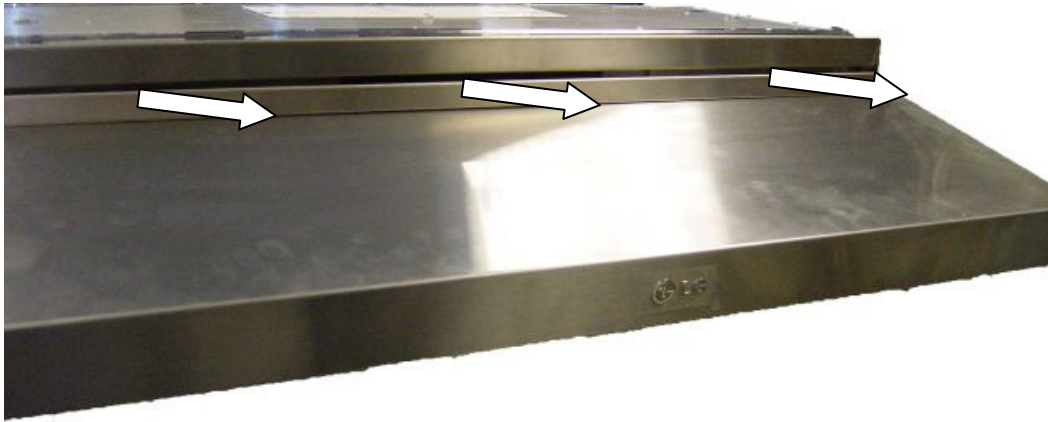
FIG 6



Recirculation installation shown

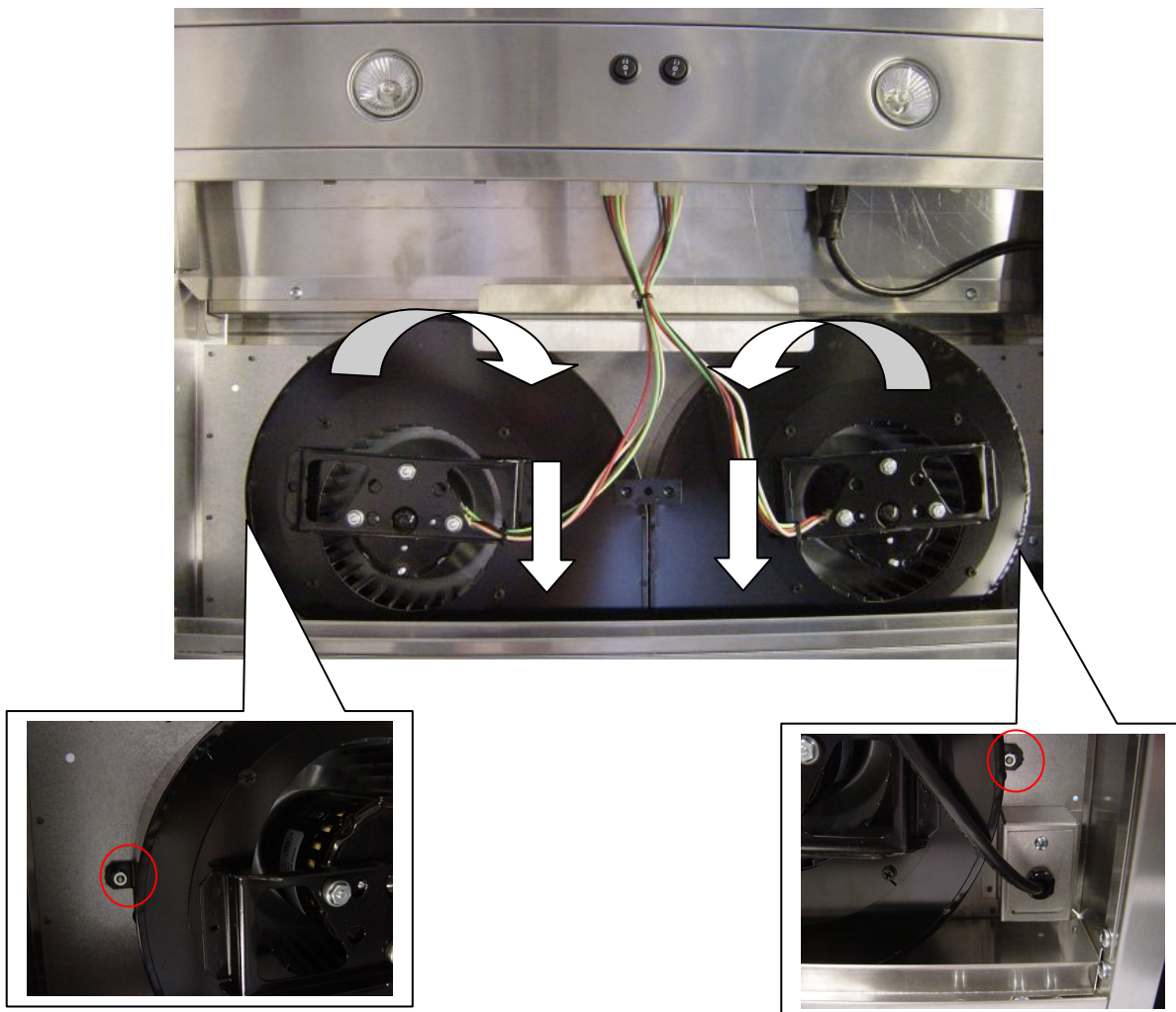
The air drawn in through the filters is regulated back into the kitchen through a top vent that runs the length of the hood as shown in FIG 7.

FIG 7



In FIG 8, the blower motor assembly has been rotated 180° for rear and top external discharge. There are (2) 5/16th nuts that secure the blower assembly to the hood housing. The insets below show each side where the nut is located (circled in red). The right one is just above the main power connection

FIG 8



When the unit is installed for exterior venting, a duct connection collar is attached to the hood and allows connection to external ducting. FIG 9 shows the hood with the vent collar attached for rear discharge. Notice a back draft damper is built into the collar. FIG 9 also shows the top access cover is in place

FIG 9

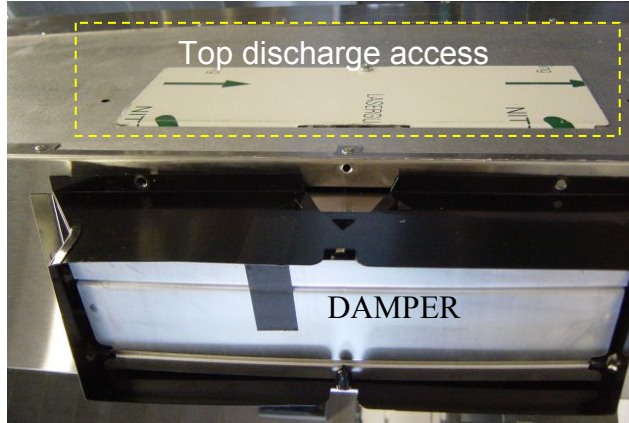


FIG 10

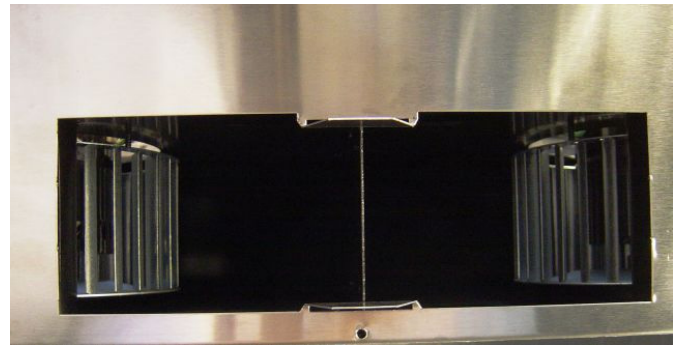


FIG 10 shows the rear of the hood with the damper removed. Notice the two squirrel wheels in place for rear discharge

Junction box (for incoming power supply) is located in upper right rear of hood.. Inside the hood a three wire power cable exits the junction box (**Fig 11**) and connects to a fixed (male) three prong plug (**FIG 12**) in the component compartment of the hood. If the lights and fan are not working, unplug the internal power plug and check for 120 volts at the female connection shown in **Fig 13**.

FIG 11

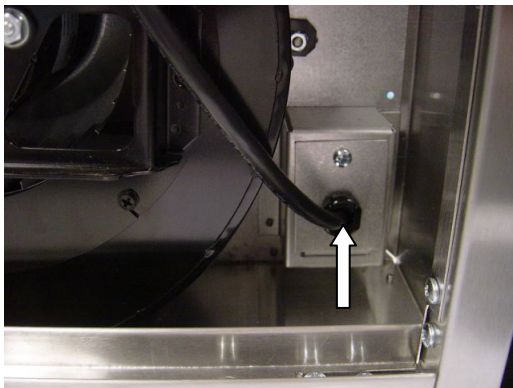
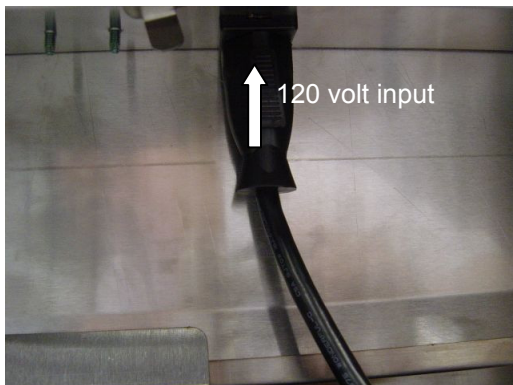


FIG 12



FIG 13



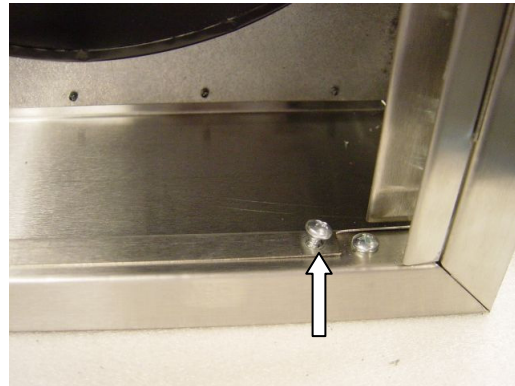
Fixed three prong connection

To access internal controls, remove left and right side trim held in place with (2) Phillips head screws shown in **FIG 14** and **Fig 15**.

FIG 14

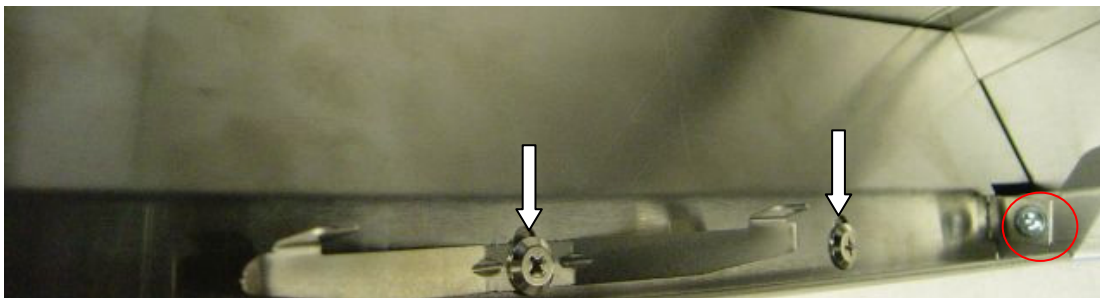


FIG 15



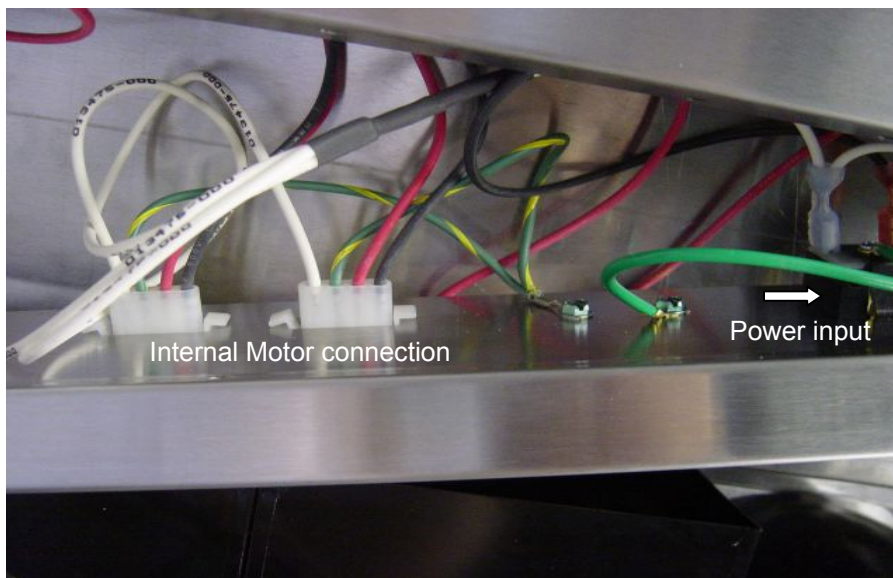
There are five Phillips head screws that hold the control panel in place. One on each side, one in the center and two that hold the filter supports in place, **FIG 16** shows one of the side screws and filter support screw. The screw circled in red holds the component compartment to the main frame and must be removed to access the switches and thermostats.

FIG 16



With the screws removed, remove the power and motor connection mounting plate from the hood. Internal wiring of the power connections is now accessible as shown in **FIG 17**.

FIG 17



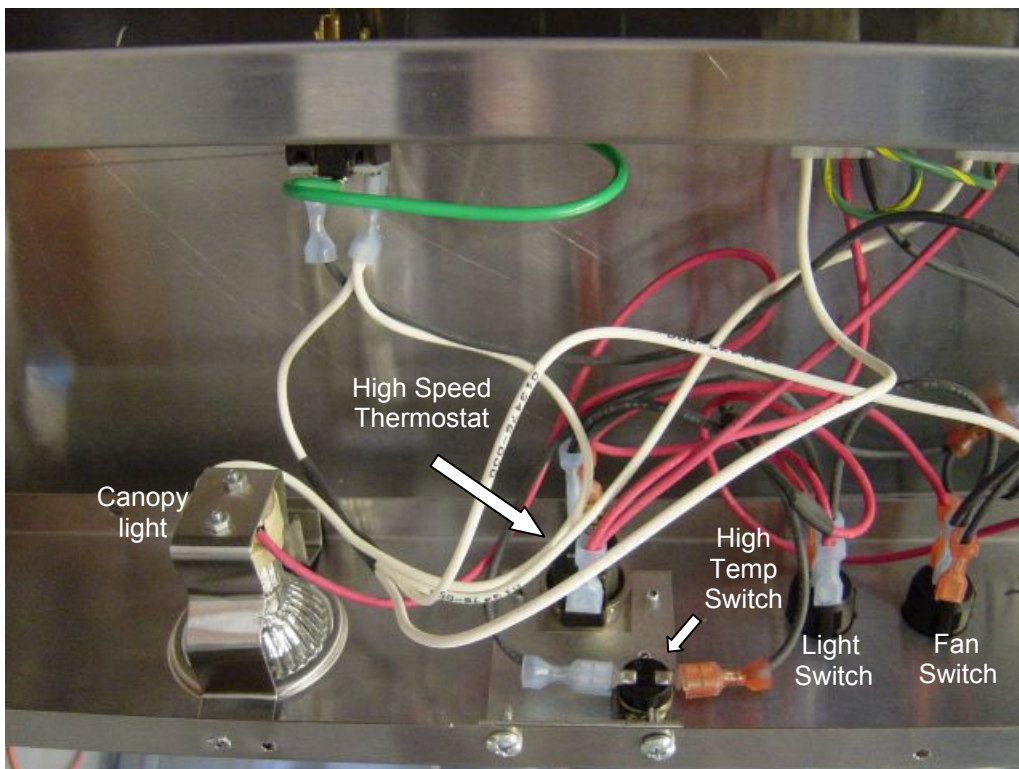
Remove the light and switch compartment. Remove screws securing the panel to the frame of the hood. One in the center and one next to each canopy light. **FIG 18** shows the location of the right side screw that secures the panel housing. (Removed in photo).

FIG 18



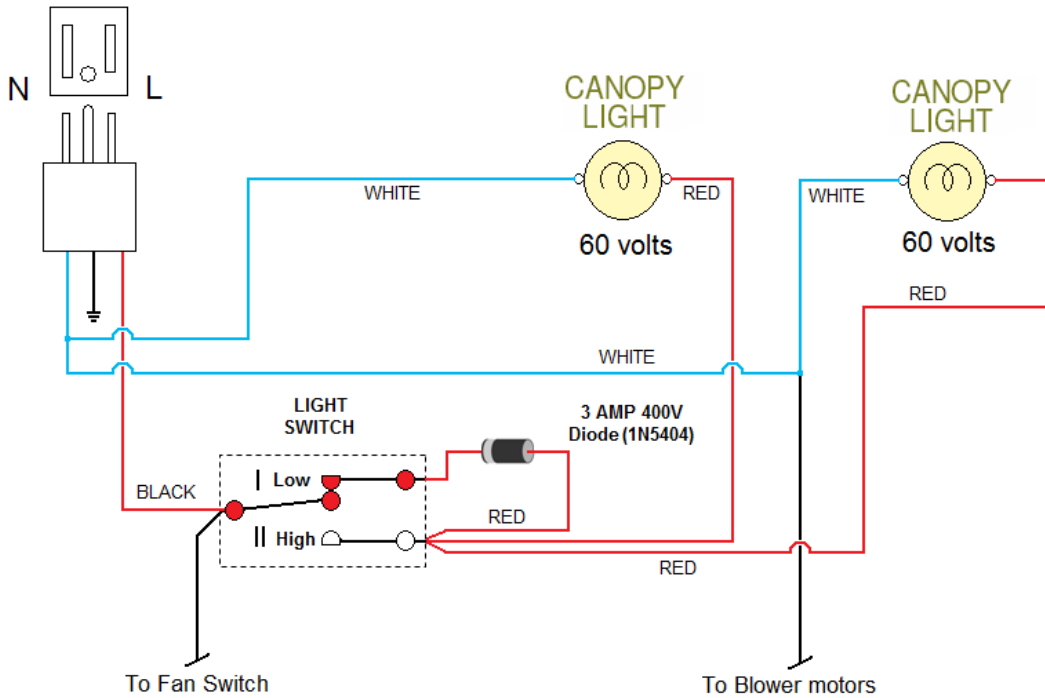
Lift the control panel from the frame to expose the internal operational components. **FIG 19** shows the Fan Switch, Light Switch, Hi-Temp Thermostat, High Speed Thermostat and halogen light socket.

FIG 19

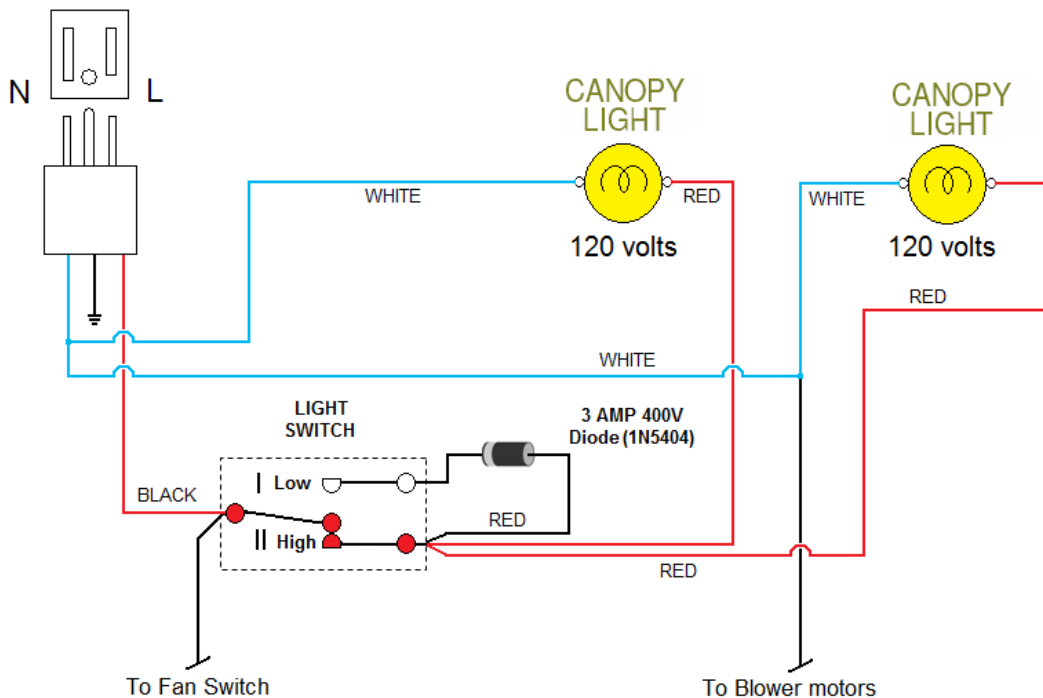


LIGHT OPERATION

When the lights are switched to position I (Low), the current runs through the light switch, through the diode which reduces the voltage to the lights. The lights will operate in a low-light condition.

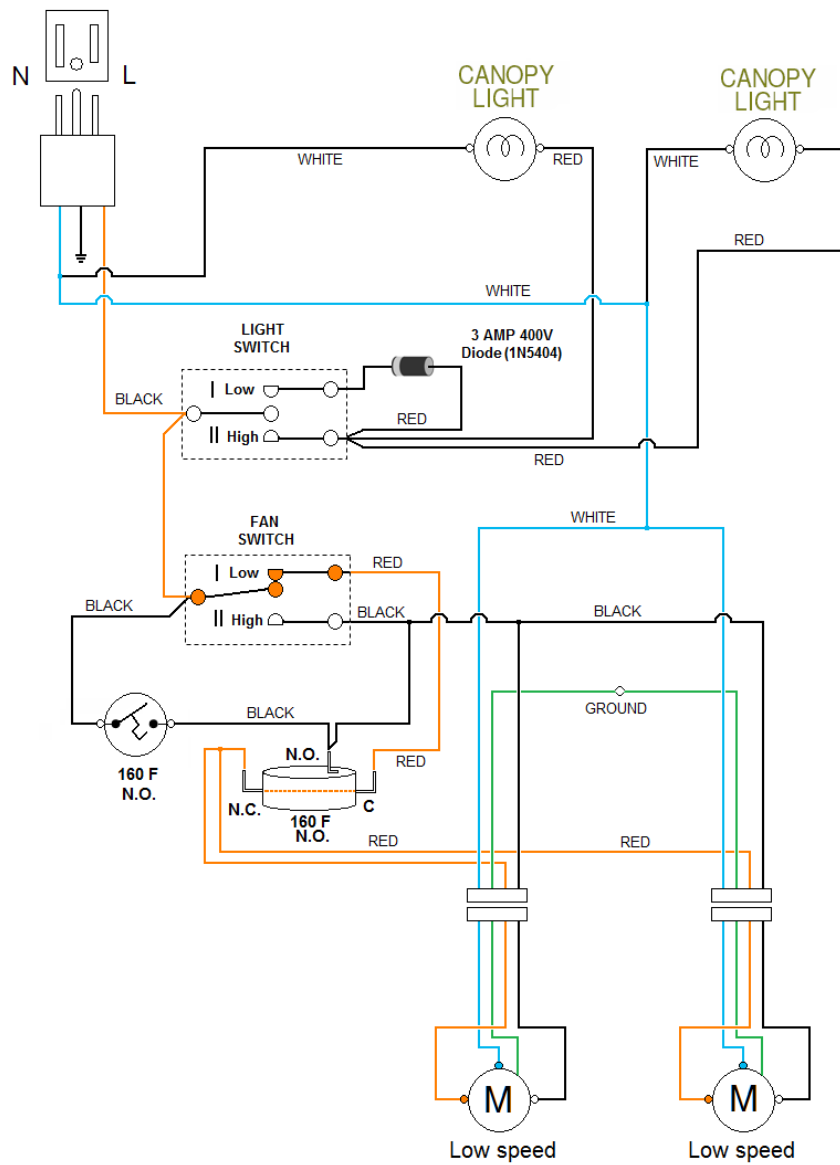


When the lights are switched to position II (High), the current runs through the light switch and directly to the lights. The lights will operate at full power.



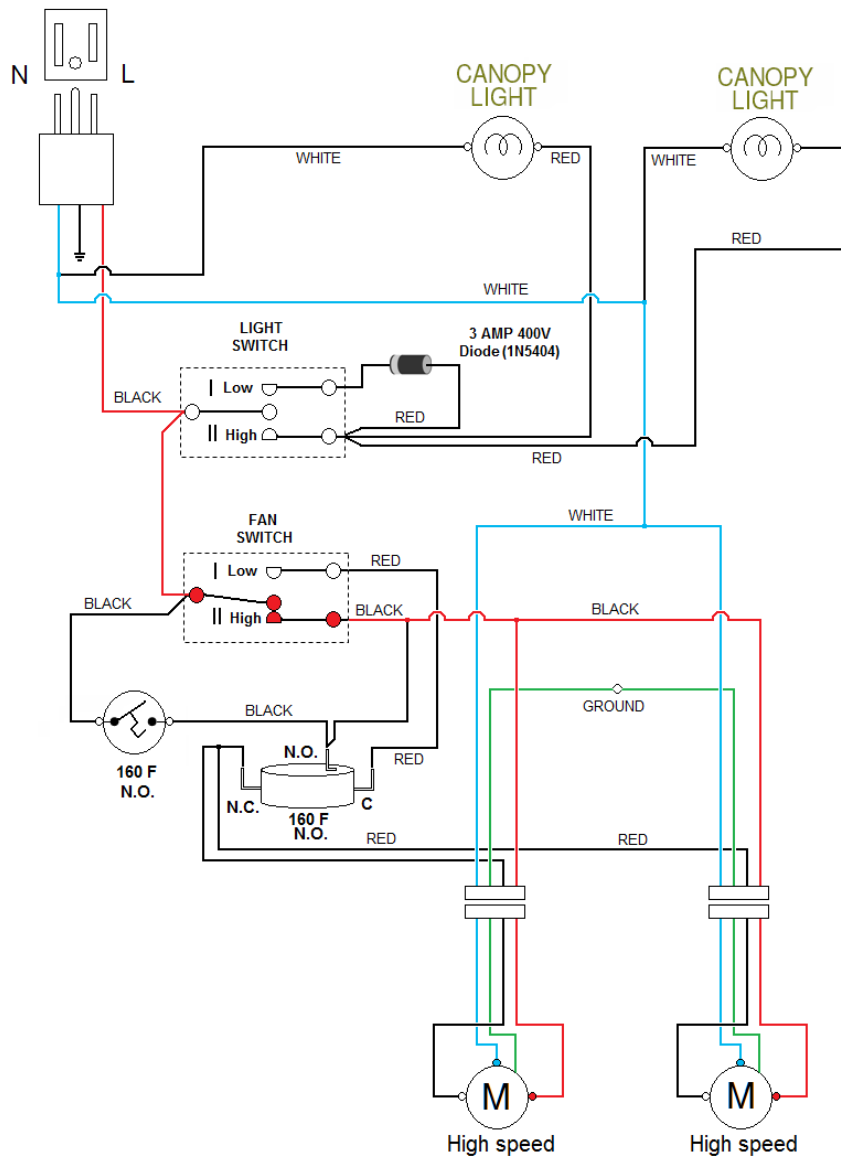
FAN OPERATION (Low Speed)

When the fans are switched to position I (Low), the current runs through the fan switch, through the Common and Normally open (N.O.) contact in the High speed thermostat. From there the current is sent to both low speed windings in the motors. The fans will operate in a low speed condition.



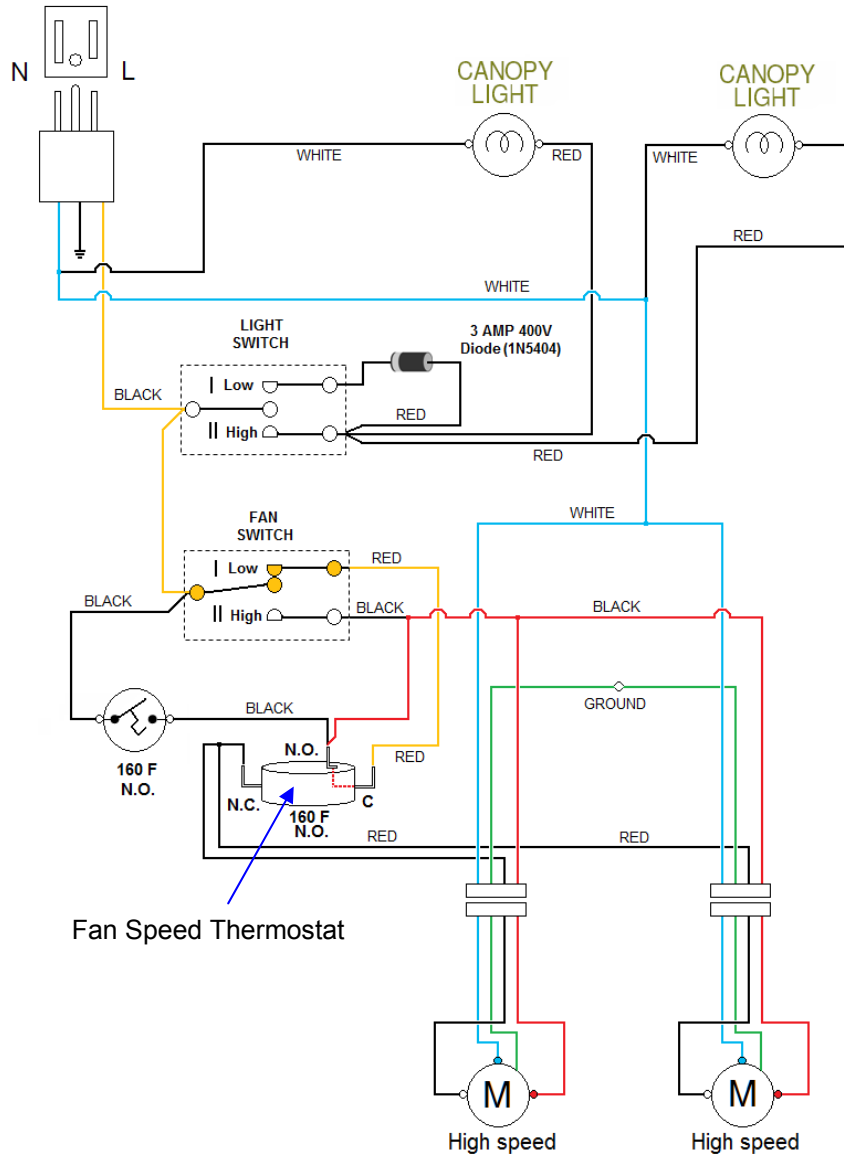
FAN OPERATION (High Speed)

When the fans are switched to position II (High), the current runs through the fan switch, through the Common and Normally open (N.O.) contact in the High speed thermostat. From there the current is sent to both low speed windings in the motors. The fans will operate in a low speed condition.



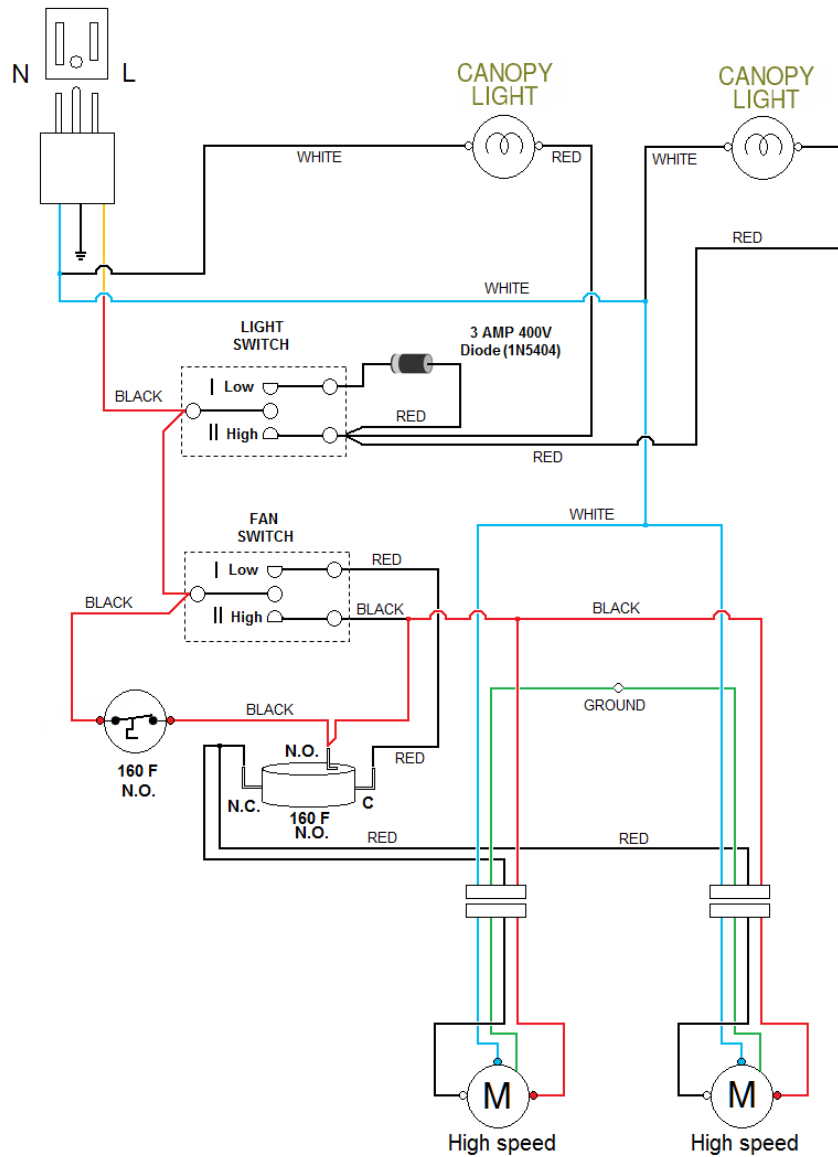
FAN OPERATION (High Speed Thermostat)

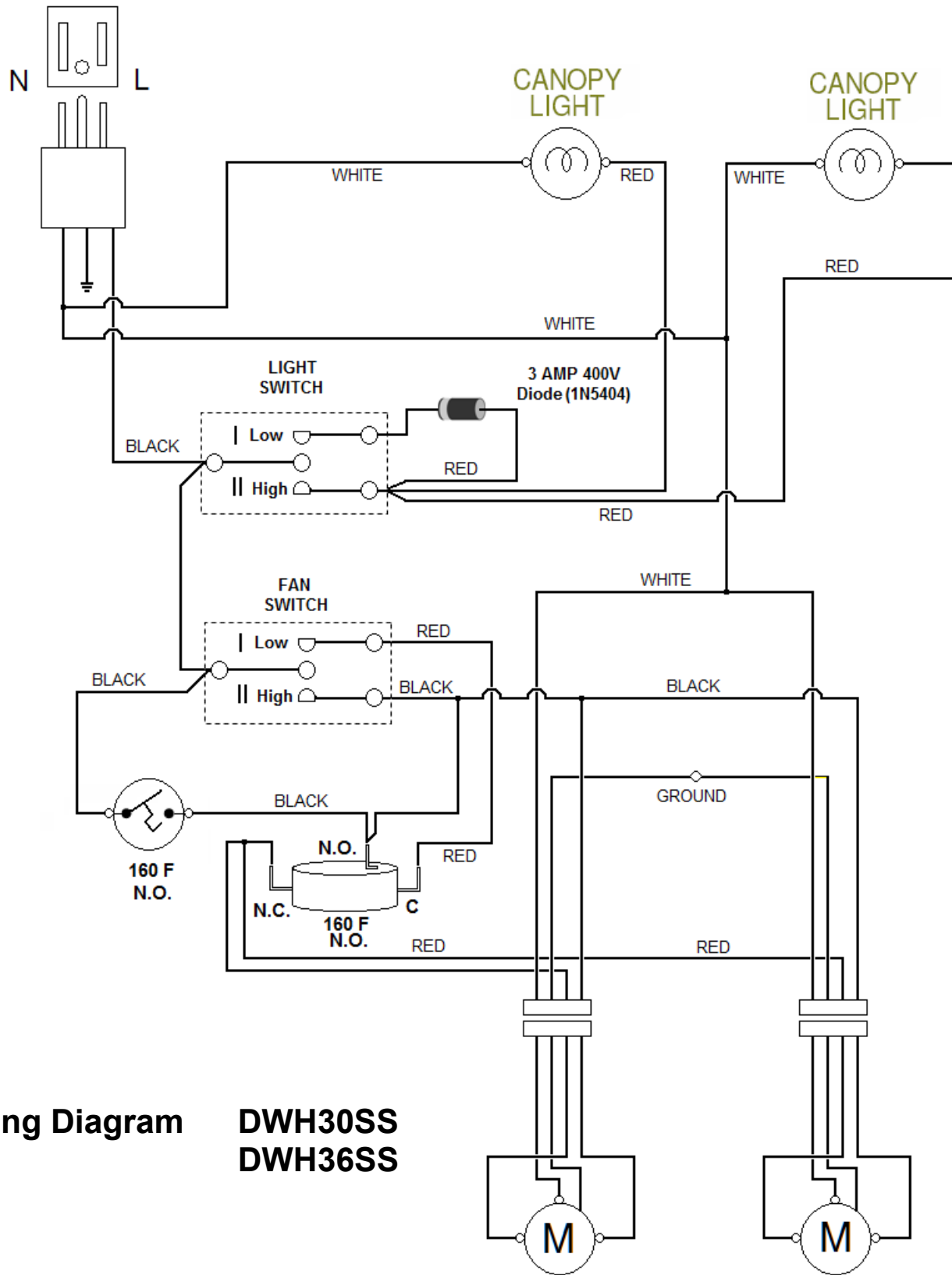
If the fans are set to run at low speed and the temperature in the hood exceeds 160° Fahrenheit, the Fan speed thermostat will switch to the Normally Open Contact and switch power from the low speed windings to the high speed windings. When the temperature drops below 160°, the thermostat will switch back to the Normally Closed contact and the fan speed will revert to low operation.



FAN OPERATION (High Temperature Thermostat)

If at any time the interior of the hood exceeds 160° F, the High Temp thermostat will close and operate the fans at HIGH speed. When the temperature drops below 160°, the fans will shut off.



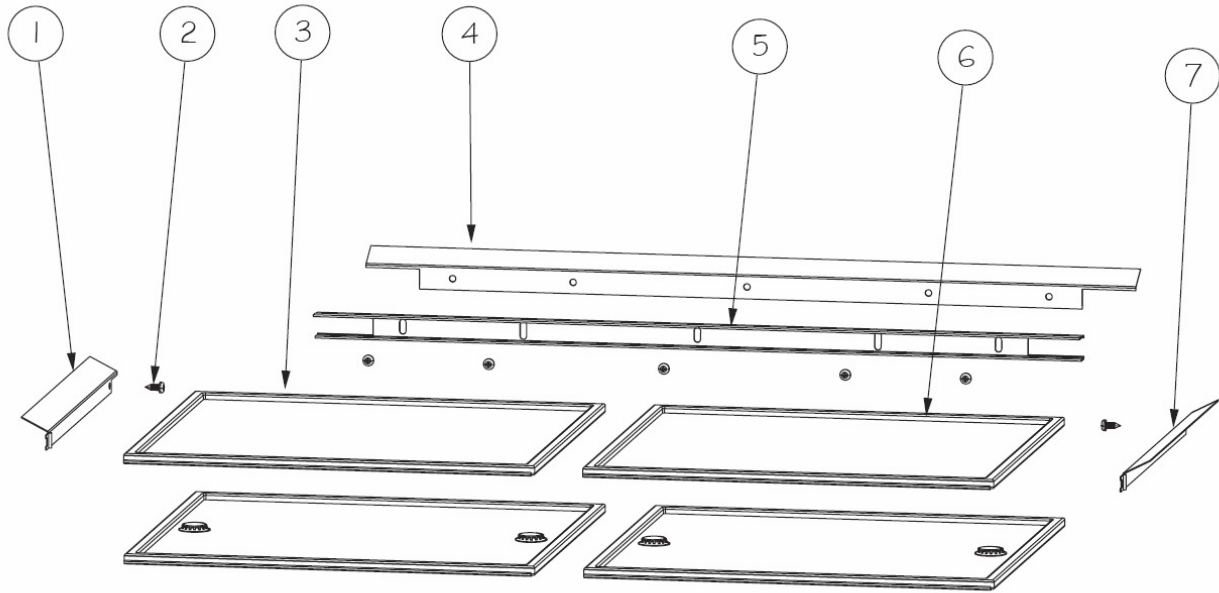


Wiring Diagram

DWH30SS
DWH36SS

PARTS BREAKDOWN

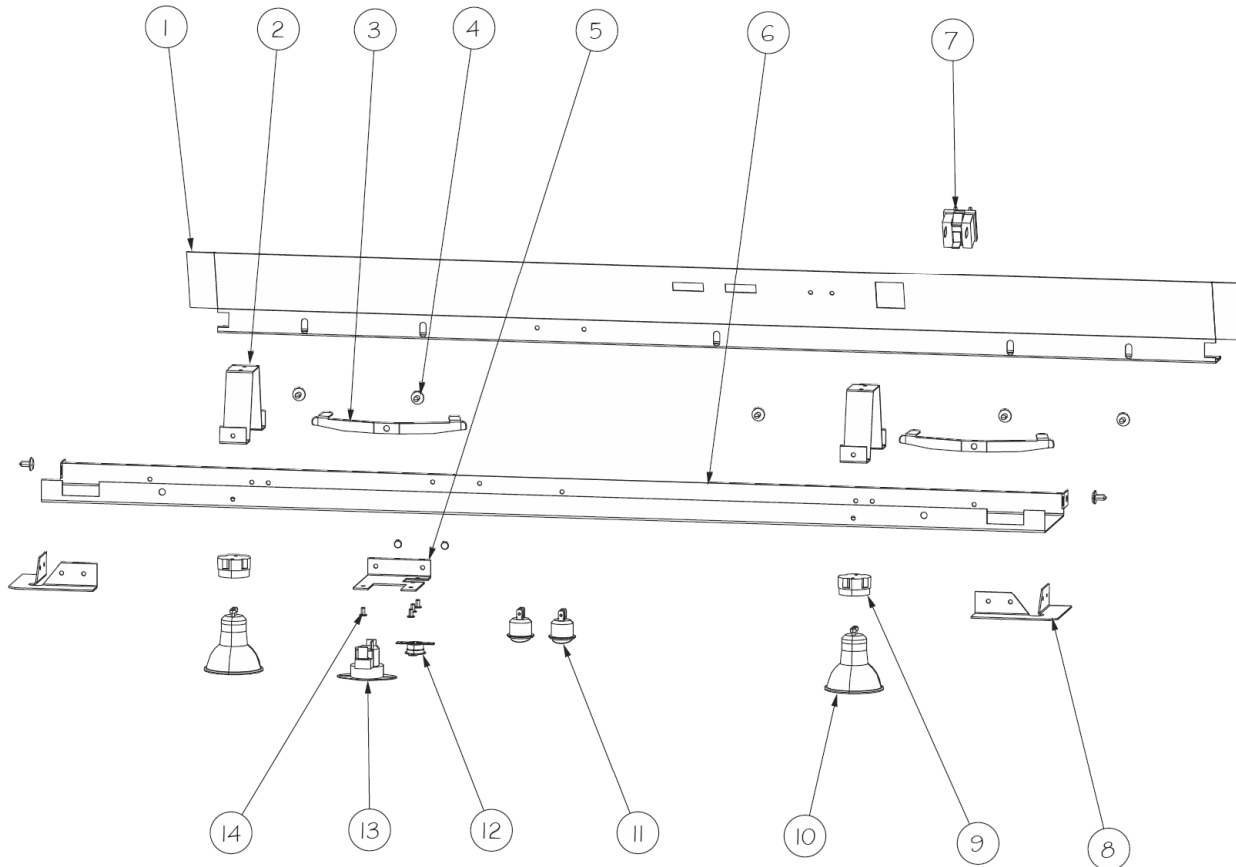
Filter Assembly DWH30



ITEM	PART NUMBER	PART DESCRIPTION	QTY	COMMENTS
1	014316-000	LH I/S SIDE COVER (DWH30/3606)	1	
2	PD020087	10 X 1/2 PAN PH. TEK ZINC	7	NON SERVICEABLE
3	009273-000	ODOR FILTER (13.5 X 13.5 X .0937)	2	
4	014313-000	I/S REAR COVER (DWH3006)	1	
5	013437-000	REAR FILTER SUPPORT (DWH3006)	1	
6	020579-000	DWH30/3606 FILTER ASSEMBLY	2	
7	014315-000	RH I/S SIDE COVER (DWH30/3606)	1	

PARTS BREAKDOWN

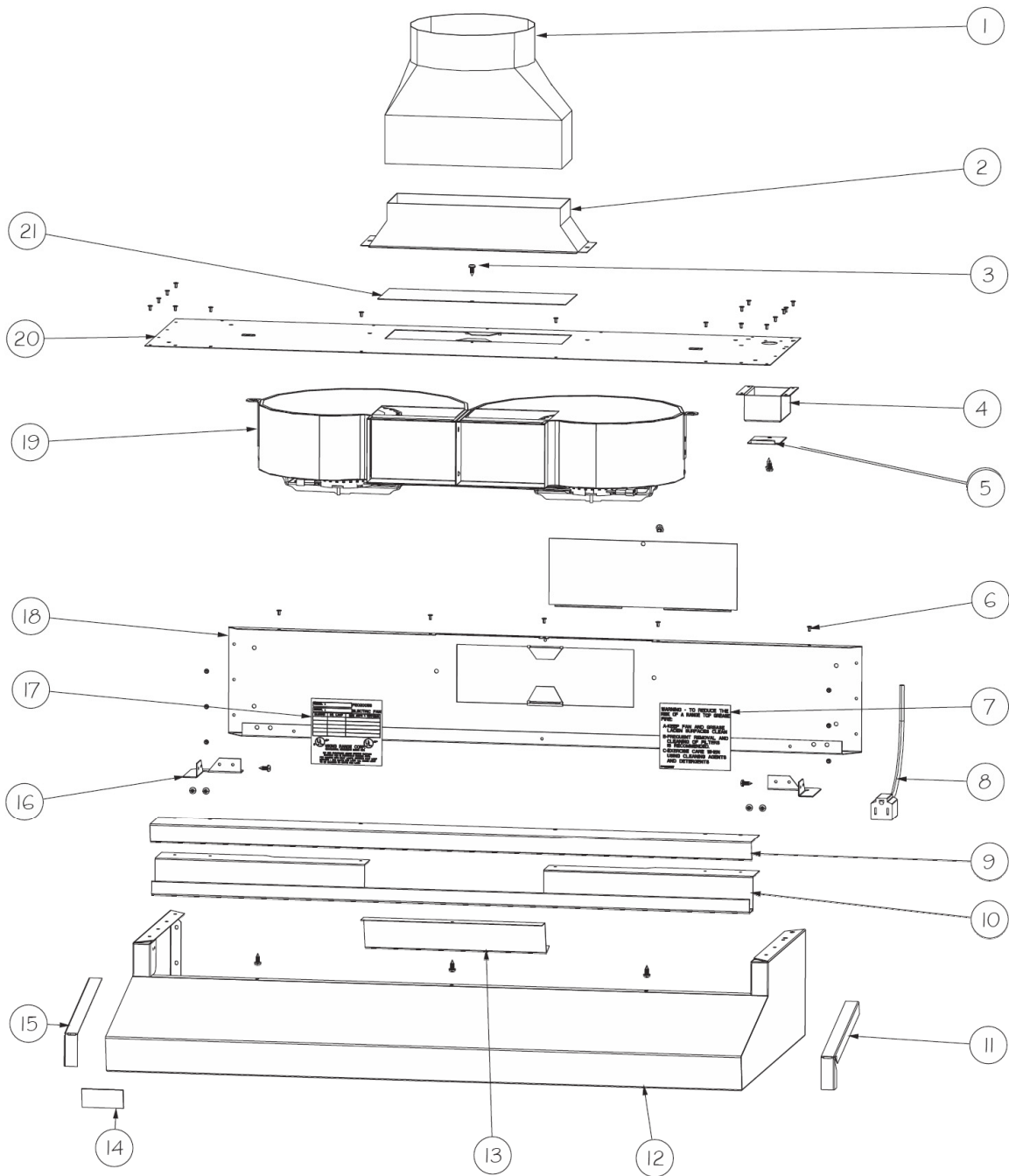
Control Assembly DWH30



ITEM	PART NUMBER	PART DESCRIPTION	QTY	COMMENTS
1	013429-000	FRONT FILTER SUPPORT (DWH3006)	1	
2	021124-000	LIGHT BRACKET	2	NON SERVICEABLE
3	002365-000	CLIP FILTER SPRING (VWH24/30/3610)	2	NON SERVICEABLE
4	PD020032	SRW-8(A)X3/8"PH.WFR HD 7/16DIA*NICL	7	NON SERVICEABLE
5	015104-000	DWH THERMOSTAT BRACKET	1	NON SERVICEABLE
6	021067-000	LIGHT SUPPORT (DWH3006)	1	NON SERVICEABLE
7	PE070197	MALE SOCKET (3 PRONG)	1	
8	013428-000	CORNER BRKT (DWH30/3606)	2	NON SERVICEABLE
9	020603-000	LIGHT SOCKET	2	
10	019420-000	HALOGEN LIGHT - 50 WATTS	2	
11	020576-000	LIGHT ASSEMBLY	2	
12	PJ030014	HEAT SENSOR (N.O.) 160 DEG.	1	
13	013319-000	3/4" DISC THERMOSTAT, SURFACE MOUNT (DWH30/3606)	1	
14	PC040010	POP RIVET (.063/GR -.125) GAMD42-A	6	NON SERVICEABLE

PARTS BREAKDOWN

Exterior Assembly DWH30



- PARTS LIST ON NEXT PAGE -