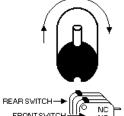
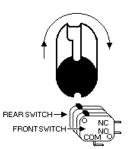
# **SERVICE NOTEBOOK** VIPR (DOWNDRAFT)

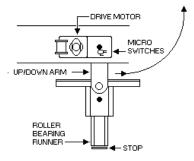
# Preferred Service

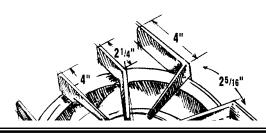






AS THE MOTOR ROTATES REAR SWITCH DEPRESSED







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#### IMPORTANT INFORMATION

The information contained in this manual is intended for use by a qualified service technician who is familiar with the application of all safety procedures required in the repair of any gas or electrical appliance, and who is equipped with the proper tools and testing instruments.

Repairs covered in this manual and made be unqualified persons can result in hazards developing due to improper assembly or adjustment.

Inexperienced persons making such repairs subject themselves to the risk of injury or electrical shock which can be serious or even fatal.

#### IMPORTANT NOTE TO CUSTOMER

If you perform service on your own Viking product, you must assume responsibility of personal injury or property damage which may result.

Viking will not be responsible for injury or property damage arising from service performed by other than Viking Factory Authorized Service Agencies.

In order to locate a Viking Factory Authorized Service Agency, please consult the dealer from whom you purchased this product. You may also write to:

Viking Preferred Service P. O. Drawer 956 Greenwood, Ms. 38930

XXXIDATI

662-451-4133

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MODEL	WIDTH	BLOWER (purchased separately)
VIPR101SS	30"	VIDV500 Internal or VEDV900 External
VIPR101RSS	30" W / remote control	VIDV500 Internal or VEDV900 External
VIPR161SS	36"	VIDV500 Internal or VEDV900 External
VIPR161RSS	36" W / remote control	VIDV500 Internal or VEDV900 External
VIPR181SS	48"	VIDV500 Internal or VEDV900 External or VIDV1200 External
VIPR181RSS	48" W / remote control	VIDV500 Internal or VEDV900 External or VIDV1200 External

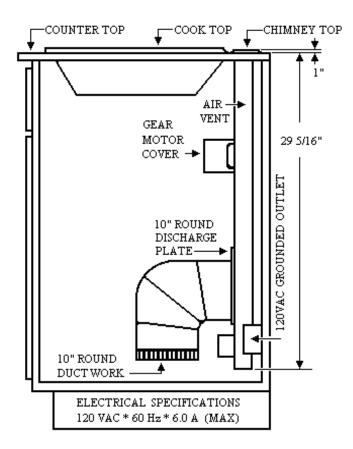


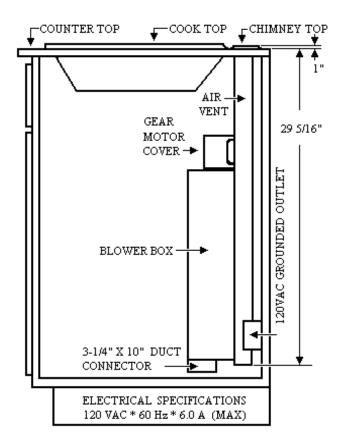
WARNING - RANGETOP - STYLE COOKTOPS ONLY: To reduce the risk of burns or ignition of clothing by reaching across burners, a RSS model downdraft (with remote control) MUST be used with a Rangetop Style Cooktop. The remote control MUST be mounted in the countertop - at least 4" from the burners.

#### TYPICAL INSTALLATION

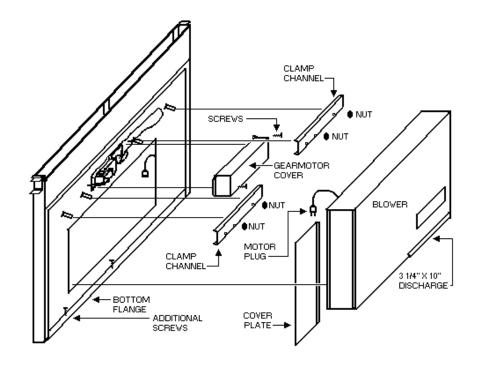
This downdraft blower system is designed to be used to exhaust air born contaminants when cooking with a variety of gas or electric cooktops. It can be mounted in island, peninsula, or conventional wall locations.

**NOTE:** THE HIGH LEVEL OF AIR FLOW OF THIS APPLIANCE MAY EFFECT THE GAS FLAME ON SOME TYPES OF GAS COOKTOPS. THIS IS **NORMAL** AND WILL CAUSE NO HARM, BUT CAN BE CORRECTED BY LOWERING THE SPEED OF THE BLOWER.

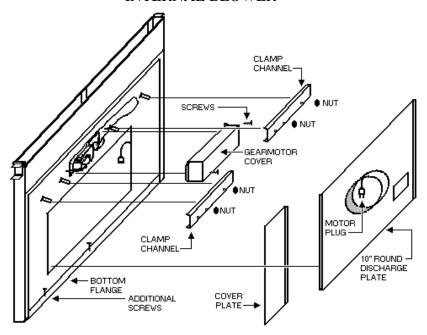




#### **BLOWER INSTALLATION**



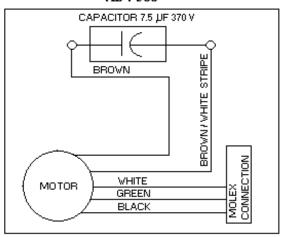
#### **INTERNAL BLOWER**

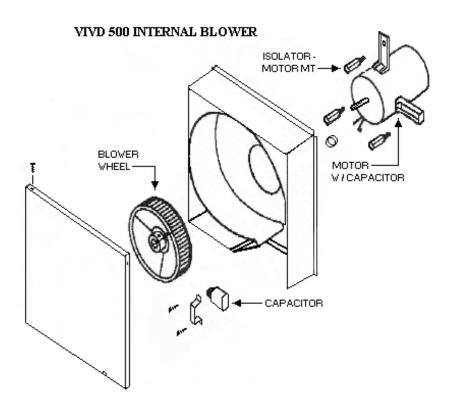


**EXTERIOR BLOWER** 

#### **VIDV 500 INTERNAL BLOWER**

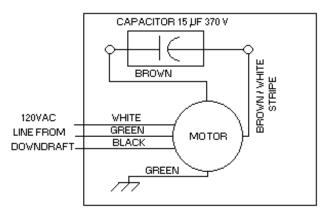
#### WIRING DIAGRAM VIDV 500

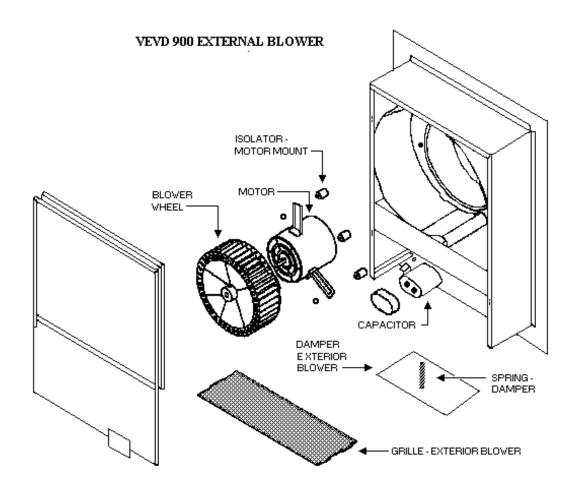




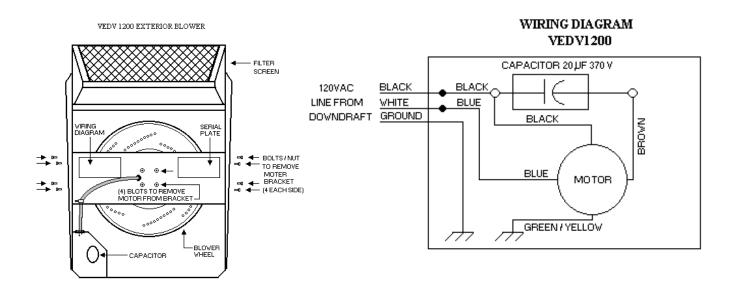
#### **VEDV 900 EXTERNAL BLOWER**

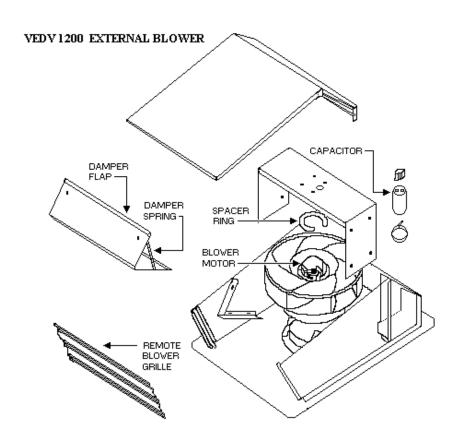
#### WIRING DIAGRAM VEDV 900





#### **VEDV 1200 EXTERNAL BLOWER**





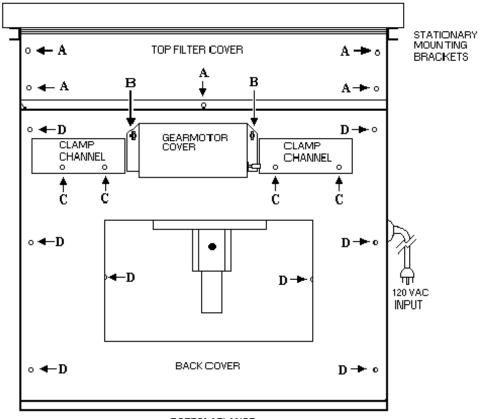
#### COMPONENT ACCESS

Remove five (5) screws marked "A" to gain access to the filter area.

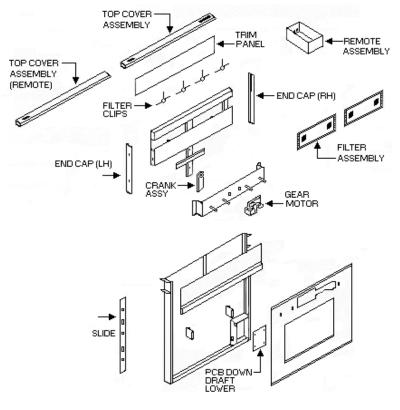
Remove two (2) screws marked "B" to gain access the gearmotor.

Remove four (4) screws marked "C" to remove blower. Tilt blower out and lift up to remove blower or 10" discharge plate.

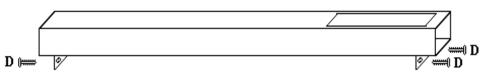
Remove six(6) screws marked "D" to remove the complete back assembly.



BOTTOM FLANGE

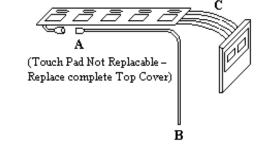


#### REMOVE TOP COVER ASSEMBLY



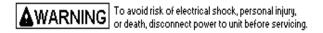
- 1. To remove the Top Cover Assembly, press up / down to raise chimney. Disconnect electrical power.
- 2. Remove four (4) mounting screws "D" (2 from each end) and lift off cover.
- 3. Pull six (6) to eight (8) inches of cable out or chimney.
- 4. Carefully turn cover upside down. Unplug cable "A" from the membrane touch pad. Observe the arrows on the cable connector. Always have the arrows pointing outward.

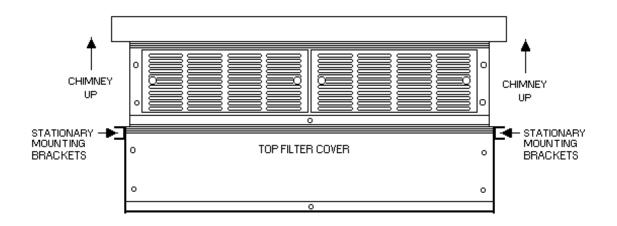
#### (DO NOT LET CABLE FALL DOWN INTO THE CHIMNEY)





While unplugging electrical connections, pins may be damaged, use extreme care when disconnecting.

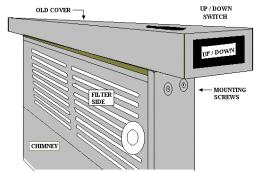




#### VIKING DOWNDRAFT TOP COVER ASSEMBLY

TOP COVER MODEL	WIDTH	COLOR	FOR USE WITH DOWNDRAFT MODEL
DRT 30 WH	30"	WHITE	VIPR101SS
DRT 30 BK	30"	BLACK	VIPR101SS
DRT 36 WH	36"	WHITE	VIPR161SS
DRT 36 BK	36"	BLACK	VIPR161SS
DRT 48 WH	48"	WHITE	VIPR181SS
DRT 48 BK	48"	BLACK	VIPR181SS

#### REMOVE OLD COVER

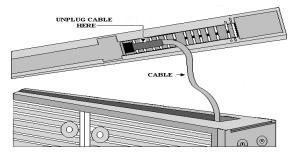


1. Press **up / down** to raise **chimney.** 



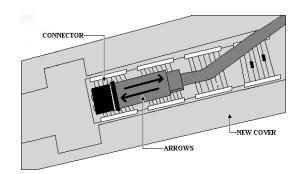
WARNING: TO AVOID RISK OF ELECTRIC SHOCK, PERSONSAL INJURY, OR DEATH, DISCONNECT POWER TO UNIT BEFORE SERVICING.

2. Remove four (4) <u>mounting screws</u> (2) from each end) and lift off existing **cover.** 

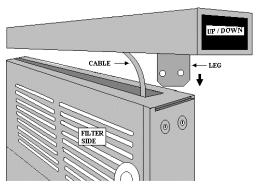


- 3. Pull 6 to 8 inches of <u>cable</u> out of the chimney.
- 4. Carefully turn top cover upside down. DO NOT LET CABLE FALL DOWN INTO CHIMNEY.

#### **INSTALL NEW COVER**



5. Plug cable into **connector** on the underside of **new cover**. Make sure **arrows** on cable end are facing outward and that cable is plugged in all the way. Also check small ribbon cable, to make sure that it is plugged in properly.

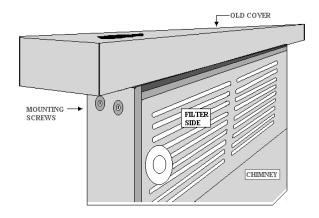


- 6. Turn top cover over and carefully feed cable back into chimney. Be careful not to unplug cable in the process.
- 7. Slide legs into each of chimney and secure top cover with four (4) mounting screws (2 on each end).
- 8. Reconnect power and check operation.

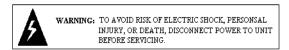
## VIKING REMOTE DOWNDRAFT TOP COVER ASSEMBLY

TOP COVER MODEL	WIDTH	COLOR	FOR USE WITH DOWNDRAFT MODEL
RRT 30 WH	30"	WHITE	VIPR101RSS
RRT 30 BK	30"	<b>BLACK</b>	VIPR101RSS
RRT 36 WH	36"	WHITE	VIPR161RSS
RRT 36 BK	36"	<b>BLACK</b>	VIPR161RSS
RRT 48 WH	48"	WHITE	VIPR181RSS
RRT 48 BK	48"	<b>BLACK</b>	VIPR181RSS

#### REMOVE OLD COVER

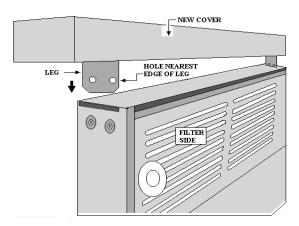


1. Press up /down switch to raise chimney.



2. Remove four (4) **mounting screws** (2 from each end) and lift off existing **cover.** 

#### **INSTALL NEW COVER**



- 3. Slide <u>legs</u> of <u>new cover</u> into ends of chimney and secure with four (4) mounting screws (2 on each end).
- 4. Re-connect electrical power and check operation.

#### VIPR OPERATION

**UP / DOWN** Raises and lowers vent. Turns blower **ON** when vent is **UP** and **OFF** when vent is **DOWN**.

**NOTE:** The UP / DOWN switch for models VIPR101SS, VIPR61SS, and VIPR181SS is on the right hand end of the top cover.

**DELAY**====== Allows blower to run for 10 minutes after button is pressed. Delay is activated by double pressing any speed control button. Blower will run for 10 minutes, then shut OFF. VENT WILL NOT LOWER. You must press UP / DOWN to lower vent. When DELAY is activate, the speed level light will blink.

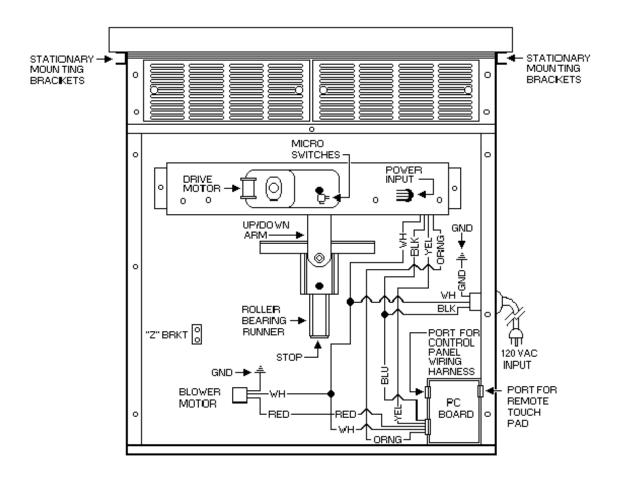
**BLOWER SPEEDS**===Blower operates at 4 different speed levels. Press button ONCE to turn blower ON to desired speed. Press button AGAIN to turn blower OFF.

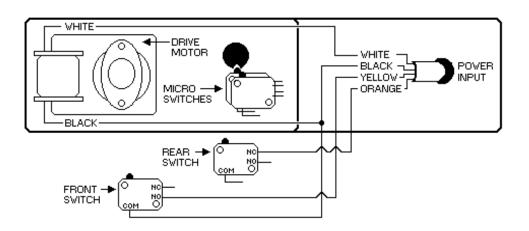
NOTE: BLOWER SPEED CHANGES CAN BE DETECTED BY THE DIFFERENCE IN THE SOUND OF THE AIR MOVEMENT. THE DUCT WORK HAS A DEFINITE EFFECT ON THE TONE. EACH ADDITIONAL ELBOW OR ADDED LENGTH TO THE DUCT RUN WILL CAUSE THE SOUND TO DEMINISH OR NOT BE HEARD AT ALL. (CHECK INSTALLATION INSTRUCTIONS FOR PROPER DUCT RUN).

**FILTER LIGHT**=====Comes ON after 30 hours of operation to remind you to clean filters. Press button to reset.



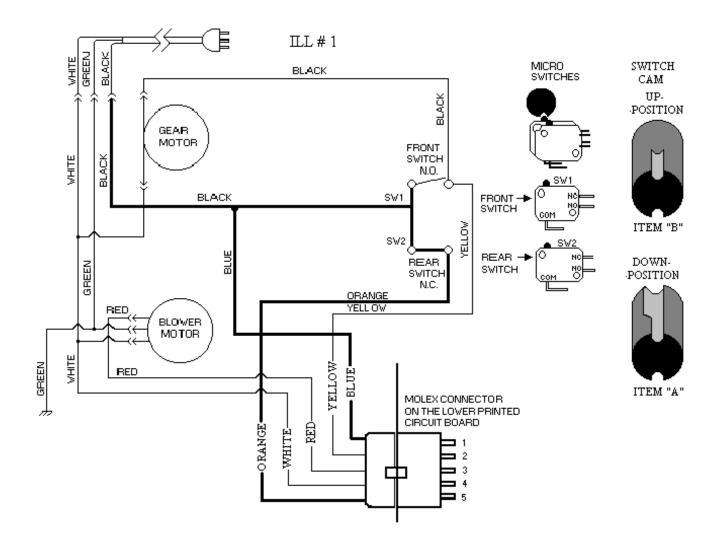
#### VIPR DOWNDRAFT WIRING SCHEMATIC AND LAYOUT



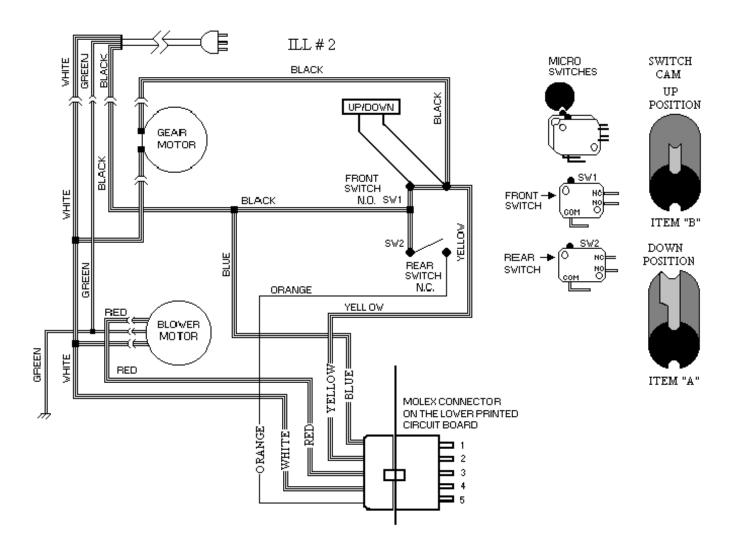


#### WIRING DIAGRAM DOWN POSITION (OFF)

Downdraft in the down position (off). The Switch Cam is in the down position (Item "A"). SW1 is open and SW2 is closed. The P.C. Board has 120VAC potential between pin #4 and pin #5.

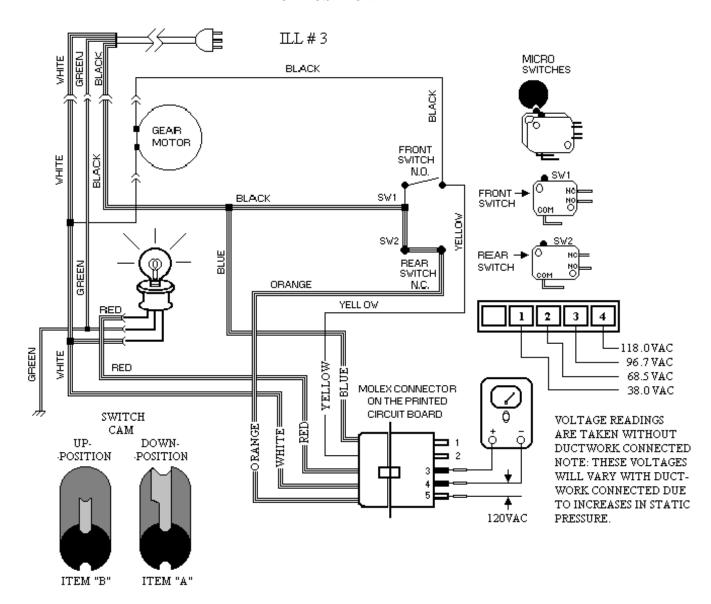


## WIRING DIAGRAM UP – POSITION



Pressing the UP / DOWN switch momentarily shunts SW1 energizing the Gear Motor. The Gear Motor rotates, closing SW1 and opening SW2. With SW1 closed the Gear Motor continues to rotate the Switch cam. The Switch Cam rotates  $180^{\circ}$  to the UP position (Item "B"), keeping SW2 closed and opening SW1 stopping the Gear Motor (Ill # 3) and leaving the chimney in the up position.

# WIRING DIAGRAM UP POSITION

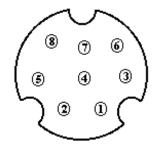


With the Chimney in the UP position, SW2 is closed supplying 120VAC to Pin #5 (black wire). The P.C. Board circuit connects power to Pin #3 (red wire) to complete power to the Blower Motor. **NOTE:** The function of the double groove in the Switch Cam (Item "A") is to keep SW2 closed to allow power to the Blower circuit.

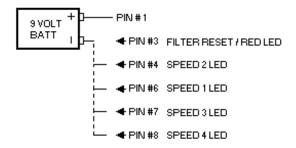
To check the power to the Blower without the motor: Attach a light bulb to the motor plug as shown. The light will glow if there is output from the P.C. Board. By pressing each speed control in turn the brightness of the bulb will change.

You can check the Voltage output at the P.C. Board. Connect the Voltmeter to the RED and WHITE output leads or the Molex connections at Pin #3 and Pin #4.

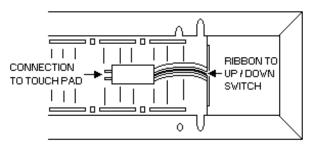
## TROUBLESHOOTING THE CONNECTING CABLE BETWEEN THE TOUCH PAD AND THE LOWER P.C. BOARD



TOUCH PAD CONNECTOR PIN #5 UP / DOWN SWITCH

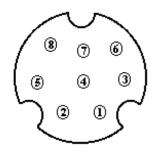


CONNECT A 9 VOLT BATTERY BETWEEN PIN #1 (+) TO EACH PIN (-), ONE AT A TIME. THE LED WILL LIGHT AS INDICATED ABOVE.

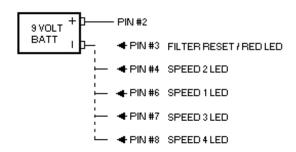


PIN#5 UP / DOWN SWITCH ON THE CABLE CONNECTOR

TO CHECK THE FUNCTION OF THE UP/DOWN TOUCH SWITCH SHORT ACROSS THE RIBBON CONNECTION TO THE TOUCH PAD (SEE ABOVE) WITH THE SWITCH SHORTED THE CHIMNEY WILL RISE AND NOT RETURN TO THE DOWN POSITION. THE SPEED TOUCH PAD WILL NOT WORK.



TOUCH PAD CONNECTOR PIN#5 UP/DOWNSWITCH



CONNECT A 9 VOLT BATTERY BETWEEN PIN #2 (+) TO EACH PIN (-), ONE AT A TIME. THE LED WILL LIGHT AS INDICATED ABOVE.

## TROUBLESHOOTING GUIDE

1.	No power to unit.	1A	Open fuse or breaker at the breaker- Fuse box.	1A	Reset Breaker or replace fuse.
2.	Power to unit, Top	2A 2B	Bad control connection cable (see details page 19) Lower P.C. Board not functioning.	2A 2B	Replace connector cable.  Replace P.C. Board after cable check.
3.	Chimney goes up and slowly drops	3A	SW2 is shorted.	3A	Replace SW2
4.	No power to Blower Motor circuit.	4A	SW1 is open	4A	Replace SW1
5.	Chimney goes up and stays when Up/Down switch is pressed – No speed changing.	5A	Up/down switch shorted (see page 19)	5A	Replace Top Assembly or remote assembly.
6.	Chimney in the up position –No power to the Blower Motor.	6A	Open Blower Motor windings.	6A 6B	Replace Blower Motor .  Check internal components as described on page 18.

Filename: VIPR20.doc

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