



## TROUBLESHOOTING

This section explains how to troubleshoot various components in Wolf V-Series Cooktop Hood.

An attempt has been made to arrange these procedures in such a way as to trace the issue from component to component.

**Note:** Before continuing, please take note of the **WARNINGS** and **CAUTIONS** below.

### **WARNING**

- TO AVOID ELECTRIC SHOCK. POWER TO HOOD MUST BE DISCONNECTED WHEN PREPARING FOR A SPECIFIC TEST. CARE SHOULD BE USED WHILE PERFORMING ANY TEST WITH THE HOOD ENERGIZED.
- IF IT IS NECESSARY TO REMOVE A HOOD FROM ITS INSTALLATION REMEMBER THAT THE UNITS ARE HEAVY AND MUST BE LOWERED FROM THE INSTALLATION.

### **CAUTION**

- When working on the Hood and components, be careful when handling sheet metal parts. There may be sharp edges present.

## Troubleshooting and Test Procedures

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<b>SYMPTOM</b>	<b>DIAGNOSTIC TEST</b>	<b>RESOLUTION</b>	<b>MANUAL PAGE</b>
Hood Lights and Blower do not energize. No GFI Circuit.	Check house circuit is 115 VAC, 15 amp, dedicated circuit.  Breaker is closed.	Bring circuit into specification.  Close Breaker.	Installation Guide. Service Manual Section 2.
	Check Voltage at J-Box: L1 to Ground = 115 VAC N to Ground = 0 VAC L1 to N = 115 VAC	Correct circuit. Correct Polarity. Correct Ground. Assure connections are tight.	Installation Guide. Test Procedure #1.
	Check Voltage at Power Cable to Easy Cube: L1 to Ground = 115 VAC N to Ground = 0 VAC L1 to N = 115 VAC	Replace or repair Power Cable.	Test Procedure #2.
	Check Voltage at three pin connector in Easy Cube Electrical Box. Pin 1 to Pin 2 =115 VAC Pin 2 to Pin 3 =0 VAC Pin 1 to Pin 3 =115 VAC	Replace/Repair Electrical Connector or wires.	Test Procedure #3.
	Check Voltage at Power Board: Pin 1 to Pin 2 =115 VAC	Replace/Repair connector from Electrical Box on Easy Cube to Power Board.	Section 3, Page 5. Test Procedure #4.

<b>SYMPTOM</b>	<b>DIAGNOSTIC TEST</b>	<b>RESOLUTION</b>	<b>MANUAL PAGE</b>
Hood Lights and Blower do not energize - continued.	<p>With Blower and Lights energized: Check 115 VAC L to N on connector (orange) to Transformer.</p> <p>Check 115 VAC Blue to Brown on terminal block in Electrical Box on Easy Cube.</p> <p>With power Off check that ribbon cable from Power Board to Touch Control is seated correctly: Ribbon Cable connector on Power Board. Locking connector in Easy Cube. Connector on Touch Pad.</p>	If Ribbon Cable is seated correctly at all points, and no voltage out of Power Board then the Power Board or Touch Control is bad. Try replacing the Power Board first.	Section 3, Page 4. Section 3, Page 5. Test Procedure #5.
Blower motor runs only at High Speed.	Power Board fault.	Replace Power Board.	Section 3, Page 5.
Hood Lights do not work.	If one LED is out in the LED Light Assembly.	Replace LED Light Assembly.	Section 3, Page 4.
	Unplug two pin connector behind Light Support and check for 12 VDC	Replace harness from Easy Cube to Hood Body.	Section 3, Page 4. Test Procedure #9.
	Ohm LED Light Assembly connector. Assure there is no short.	Replace LED Light Assemblies.	Section 3, Page 4. Test Procedure #10.
	<p>Unplug two pin connector in Easy Cube and check for 12 VDC.</p> <p><b>Note:</b> Internal Blower may need to be removed.</p>	Replace harness from Easy Cube to Transformer.	Section 3, Page 5. Test Procedure #8.
	Remove connector from Secondary side of Transformer and check for 12 VDC between pins on Transformer.	If no voltage replace the Transformer.	Section 3, Page 5. Test Procedure #7.

<b>SYMPTOM</b>	<b>DIAGNOSTIC TEST</b>	<b>RESOLUTION</b>	<b>MANUAL PAGE</b>
Hood Lights do not work - continued.	Remove connector LUX1 from Power Board and check for 115 VAC from Pin 1 to Pin 2.	If Blower Motor is working, replace Power Board.	Section 3, Page 4. Test Procedure #6.
	Remove connector from Primary side of Transformer and check for 115 VAC between Orange wires.	Replace/Repair harness from Power Board to Transformer.	Section 3, Page 5. Test Procedure #5.
Blower Motor does not run at any speed.  <b>Note:</b> Perform Checks for Internal Blower Motor or Checks for External/Inline Blower Motor Prior to these checks.	Check Voltage at J-Box: L1 to Ground = 115 VAC N to Ground = 0 VAC L1 to N = 115 VAC	If Lights are working, likely this is a short or loose connection.	Installation Guide. Test Procedure #1.
	Check Voltage at Power Cable to Easy Cube: L1 to Ground = 115 VAC N to Ground = 0 VAC L1 to N = 115 VAC	Replace/Repair Electrical Connector or wires	Installation Guide. Test Procedure #2.
	Check Voltage at three pin connector in Easy Cube Electrical Box. Pin 1 to Pin 2 = 115 VAC Pin 2 to Pin 3 = 0 VAC Pin 1 to Pin 3 = 115 VAC	Replace/Repair Electrical Connector or wires.	Test Procedure #3.
	Check Voltage at Power Board: Pin 1 to Pin 2 = 115 VAC	Replace/Repair connector from Electrical Box on Easy Cube to Power Board.	Section 3, Page 5. Test Procedure #4.
	Check for 115 VAC at terminal block in Electrical Box on Easy Cube.	Replace/Repair connector from Power Board to Electrical Box.	Test Procedure #5b.
Checks for Internal Blower Motor.  <b>Notes:</b> Perform "Blower Motor does not run at any speed" checks after these checks if needed.  Internal Blower will need to be removed.	Unplug three pin connector and check for 115 VAC Pin 1 to Pin 3 inside Easy Cube.	Replace harness from terminal block to Easy Cube Connector.	Test Procedure #11.
	Disconnect Internal Blower connector from Blower, check for 115 VAC Pin 4 to Pin 5 on Hood side of connector.	Replace Blower Motor Harness.	Section 3, Page 4. Test Procedure #12.
	On motor Side of connector Ohm out: Pin 4 to Pin 5. Pin 4 to motor case. Pin 5 to motor case.	If reading Open Pin 4 to Pin 5, or Continuity Pin 4 or Pin 5 to motor case, confirm it is not Blower Motor Harness, then replace Blower Motor.	Section 3, Page 4. Test Procedure #13.

<p>Check for External/Inline Blower Motor.</p> <p><b>Note:</b> Perform “Blower Motor does not run at any speed” checks after these checks if needed.</p>	<p>On motor side of terminal block disconnect External/Inline Blower Motor wires: Ohm out between wires. Ohm each wire to ground.</p>	<p>If reading Open between Blower wires, or Continuity from either Blower Wire to Ground: Check that the wiring between terminal block and Blower Motor is good. If wiring is good, replace External/Inline Blower.</p>	<p>Installation Guide. Test Procedure 14.</p>
<p>Blower Motor runs, but not at all four Speeds.</p>	<p>This failure can be caused by failure of the Triac on the Power Board or by a Touch Control Failure. At this time there is no test to determine where the failure is.</p>	<p>Replace Power Board or Touch Control.</p>	<p>Section 3, Page 4 Section 3, Page 5</p>
<p>Hood does not move enough Air.</p>	<p>Correct ducting installed. Verify the duct run is the correct size including: Wall/Roof Cap is correct. No reduction in size at any point. Damper is installed correctly. No excessive elbows. No excessive length. No air box used.</p>	<p>Correct Duct issue.</p>	<p>Installation Guide. Service Manual Section Two.</p>
	<p>Blower Motor is not changing speeds. On Internal Blowers remove ducting above Easy Cube. On Inline blowers remove ducting on inlet and outlet. On External Blowers Remove inlet ducting.</p> <p><b>Note:</b> With ducting attached a possible restriction will prevent hearing the speed change.</p>	<p>If no speed change noticed see “<b>Blower Motor runs, but not at all four speeds.</b>”</p> <p>If there is a speed change review ducting again for restriction.</p>	<p>Installation Guide. Service Manual Section Two.</p>
	<p>Filters are Dirty.</p>	<p>Remove Filters to test, then clean Filters.</p>	<p>Use and Care.</p>
	<p>Insufficient Make Up Air</p>	<p>Open outside door or window to test.</p>	<p>Contact HVAC company.</p>

## Test Procedures

### 1. Testing Line Voltage at J-Box.

J-Box is mounted to the Support Frame on Island Hoods and is mounted by Installer on wall behind Upper Chimney on Wall Hoods. (See Figure 4-1)

- Disconnect wires between Electrical Supply and Hood.
- Measure voltage from Electrical Supply L1 (typically Black) to Ground. Voltage should be 115 VAC.
- Measure voltage from Electrical Supply Neutral (typically white) to ground. Voltage should be 0 VAC.
- Measure voltage from Electrical Supply L1 to Neutral. Voltage should be 115 VAC.
- Confirm both ground screw connections are tight.

### 2. Testing Line Voltage at the Power Cable.

Power Cable plugs into the top of the Electrical Box on Easy Cube. (See Figure 4-1)

- Inside Power Cable measure voltage from L1 to Ground. Voltage should be 115 VAC.
- Inside Power Cable measure voltage from Neutral to Ground. Voltage should be 0 VAC.
- Inside Power Cable measure voltage from L1 to Neutral. Voltage should be 115 VAC.
- Check resistance (ohms) between Ground on Power Cable and another Ground terminal on a near by outlet. You should read Continuity.

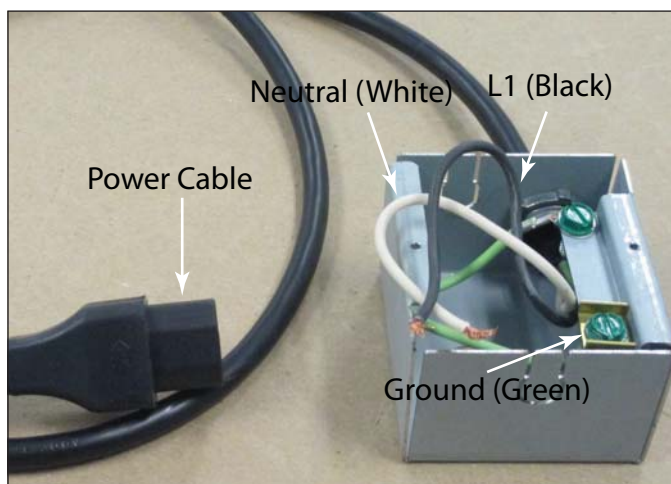


Figure 4-1. Hood J-Box

### 3. Testing Line Voltage at 3 Pin Connector in Electrical Box.

Inside Electrical Box on top of Easy Cube is a 3 pin connector that connects the Power Cable receptacle to Power Board connector.

### 3. Testing Line Voltage at 3 Pin Connector in Electrical Box - continued

Disconnect 3 Pin Connector and test on Power Cable Receptacle side of connector.

(See Figure 4-2)

- Measure voltage from Pin 1 to Pin 2. Voltage should be 115 VAC.
- Measure voltage from Pin 2 to Pin 3. Voltage should be 0 VAC.
- Measure voltage from Pin 1 to Pin 3. Voltage should be 115 VAC.

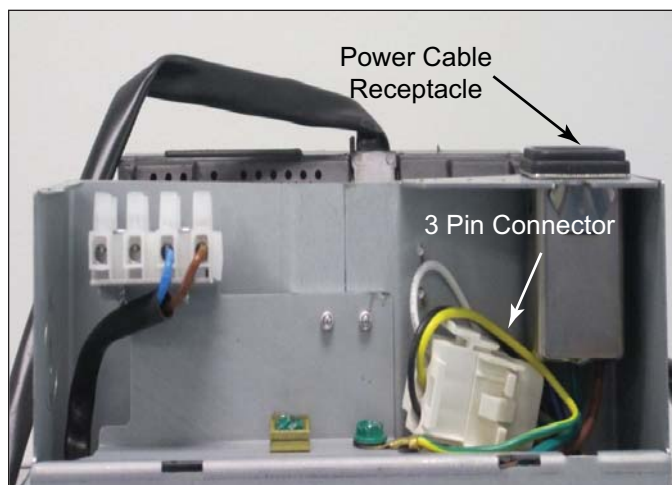


Figure 4-2. 3 Pin Connector in Electrical Box

### 4. Testing Line Voltage at 7 Pin Connector on Power Board.

On Power Board disconnect 7 Pin Connector from Power Board. Test on Wire side of connector.

(See Figure 4-3)

- Measure voltage from Pin 1 to Pin 2. Voltage should be 115 VAC.



Figure 4-3. 7 Pin Connector in Power Board



## 5. Testing Line Voltage to Transformer and Blower Motor.

Perform both of these tests with the Blower Motor and Lights Energized.

- Disconnect two pin connector or screws with two orange wires to Transformer. Measure voltage between two pins or wires on Power Board side of connector. Voltage should be 115 VAC. (See Figure 4-4)
- Measure voltage between terminal posts on the Terminal Block inside Electrical Box. Voltage should be 115 VAC. (See Figure 4-5)

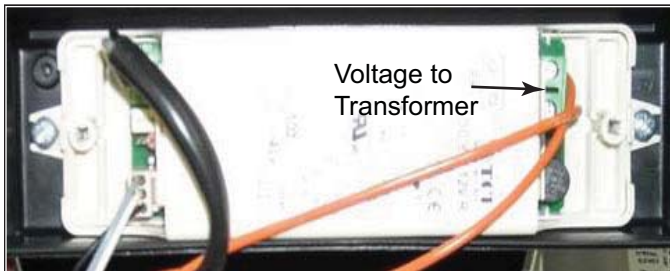


Figure 4-4. Light Transformer

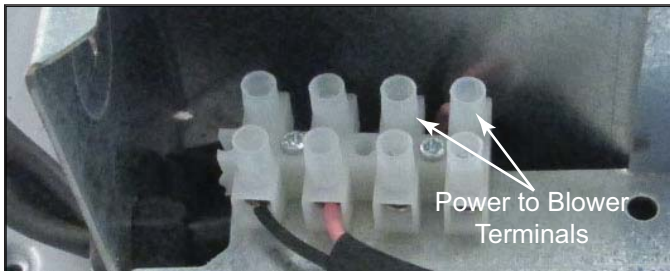


Figure 4-5. Terminal Block

## 6. Testing Line Voltage to Transformer on Power Board.

On Power Board LUX1 is the voltage to Transformer.

- Disconnect LUX1 from Power Board and measure voltage between the pins on the board. Voltage should be 115 VAC. (See Figure 4-6)

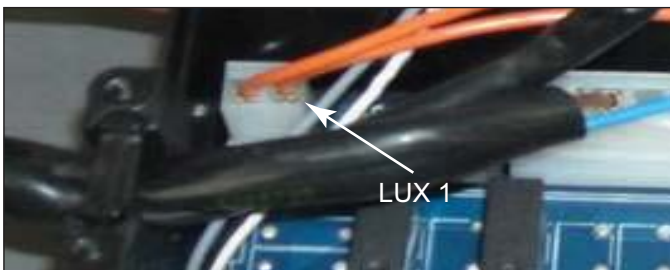


Figure 4-6. LUX1 Connector on Power Board

## 7. Testing 12 VDC from Transformer Secondary.

Wires in sheath are 12 VDC to LED Assemblies.

The three pin connector is the Lighting Command Harness. (See Figure 4-7)

- Disconnect two pin connector from secondary side of Transformer. Measure voltage on pins of Transformer. Voltage should be 12 VDC.
- Disconnect three pin connector from secondary side of Transformer. Measure voltage between pins that correspond with black and white wire on the connector. Voltage should be 12 VDC.
- Disconnect three pin connector from secondary side of Transformer and Power Board. Check Continuity from each wire in Lighting Command Harness.

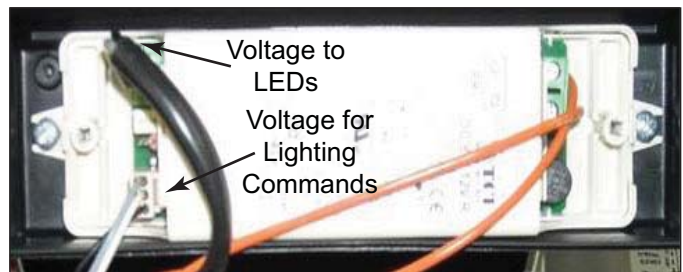


Figure 4-7. Transformer Secondary

## 8. Testing Lighting Voltage at Easy Cube

- If Hood has an Internal Blower it will need to be removed to perform this check.
- Disconnect two pin Lighting Harness from Easy Cube connection. (See Figure 4-8).
- Measure voltage between pins of connector inside Easy Cube. Voltage should be 12 VDC.

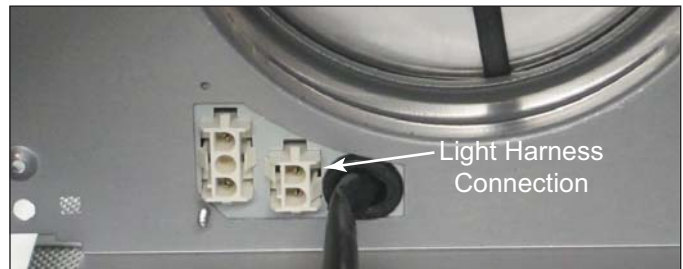
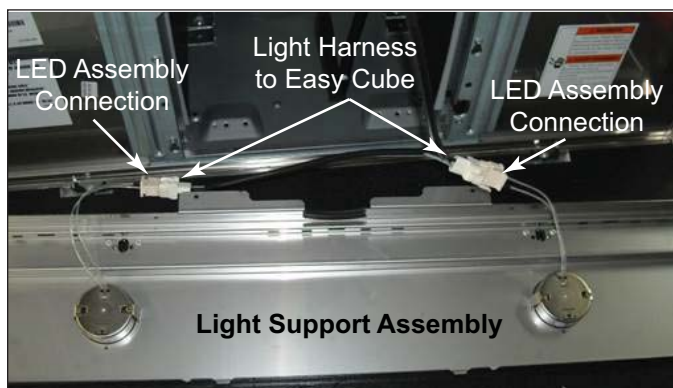


Figure 4-8. Lighting Connection in Easy Cube

## 9. Testing Lighting Voltage at Light Support

- Disconnect two pin Lighting Harness from LED Assembly connection. (See Figure 4-9).
- Measure voltage between pins of connector on Easy Cube side of connection. Measure voltage at each Lighting Harness connection. Voltage should be 12 VDC.



**Figure 4-9. Lighting Connection on Light Support**

## 10. Testing LED Assembly for a Short.

- Disconnect two pin Lighting Harness from LED Assembly connection. (See Figure 4-9).
- Measure resistance from each pin of LED Assembly connector to LED Assembly case. There should be no Continuity.

## 11. Testing Blower Voltage Easy Cube Connection.

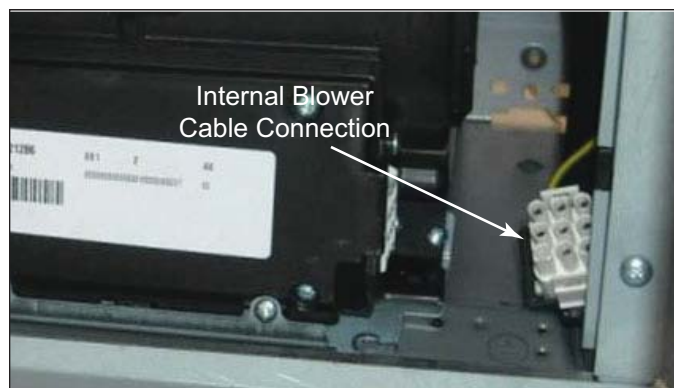
- Remove Internal Blower.
- Disconnect three pin Internal Blower Harness from Easy Cube connection. (See Figure 4-10)
- Check for 115 VAC between Pin 1 and Pin 3 inside Easy Cube.



**Figure 4-10. Blower Connection in Easy Cube**

## 12. Testing Blower Voltage at Blower Connection

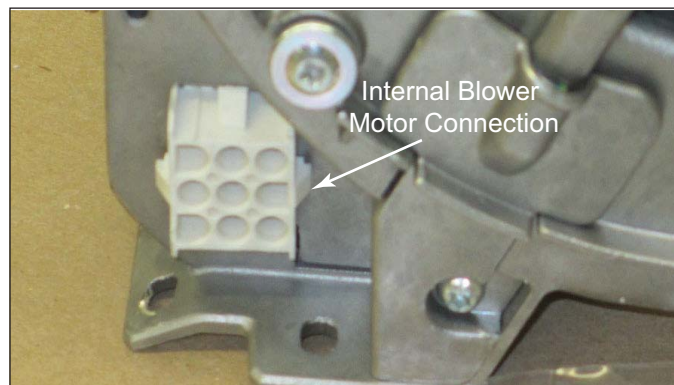
- Disconnect Internal Blower Cable connection from Internal Blower. (See Figure 4-11).
- Measure voltage between pins 4 and 5 on the Easy Cube side of connector.



**Figure 4-11. Internal Blower Cable Connector**

## 13. Testing Internal Blower for Open or Short

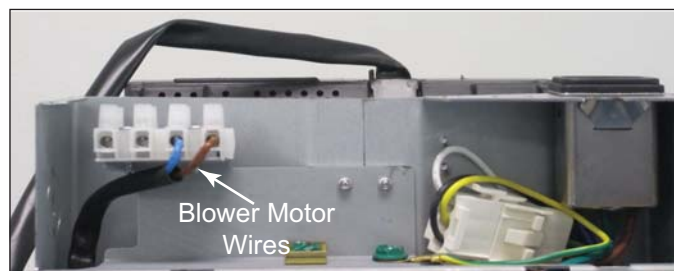
- Disconnect Internal Blower Cable connection from Internal Blower. (See Figure 4-12).
- Measure resistance Pin 4 to Pin 5. If it is open, replace Blower Motor.
- Measure resistance Pin 4 to Blower Motor case, and Pin 5 to Blower Motor case. If there is Continuity, replace Blower Motor.



**Figure 4-12. Internal Blower Motor Connection**

## 14. Testing External/Inline Blower for Open or Short

- Disconnect External/Inline Blower Motor wires from Terminal Block. (See Figure 4-13).
- Measure resistance wire to wire. Measure resistance each wire to ground.
- If step 14a reads Open or 14b reads Continuity, then confirm the wiring from the Terminal Block to the Blower Motor is good. If the wiring is good, replace the Blower Motor.



**Figure 4-13. Terminal Block**