



Electronic Ignition Troubleshooting

Gas Fireplaces 2011

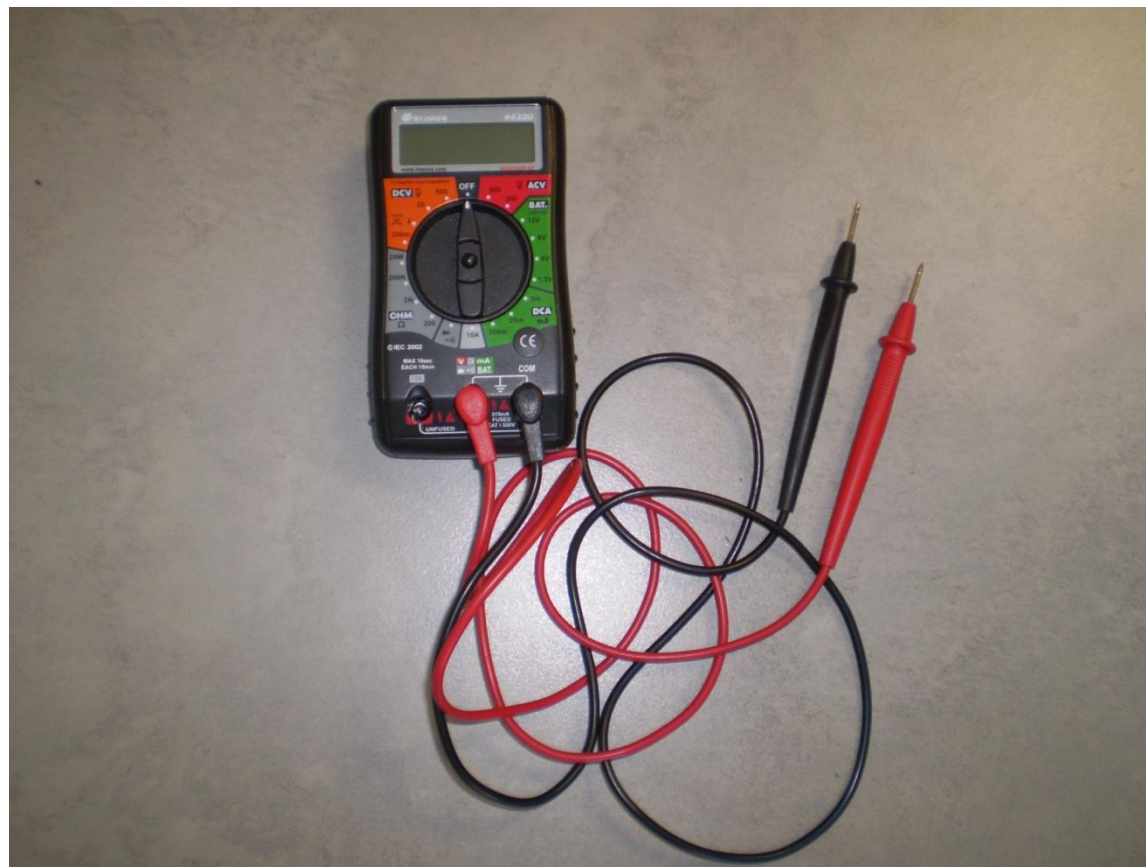
DSI SYSTEM

- Direct spark ignition system
- Control module responds to heat demand from the thermostat or switch by generating high voltage, low current electrical pulses
- These pulses are transmitted from the control module to the spark electrode.
- As the control module is generating sparks it also powers the 24 vac gas control valve to allow gas to flow for about 4-7 seconds.
- If the main burner ignites within the 4-7 second ignition try, the control module generates a small electrical current that passes from the flame rod through the flame to the burner it is now converted to DC Microamps by flame rectification and then is grounded back to the control module. When the flame is sensed by this signal, the control module stops generating sparks. As long as this signal returns to the control module, the module powers the gas control valve to continue gas flow.

EI UNITS

- HD35-40-46
- BGD36CFG CRYSTALLO
- GT8 TORCH
- GDI30G
- LHD50
- LHD45
- HD81
- GD36NTRE
- HDX40
- GD19 VITTORIA
- GD36MN MANHATTAN
- GDS60-1
- GDS25
- GDS26

MULTI METER



SIT EI PILOT ASSEMBLY

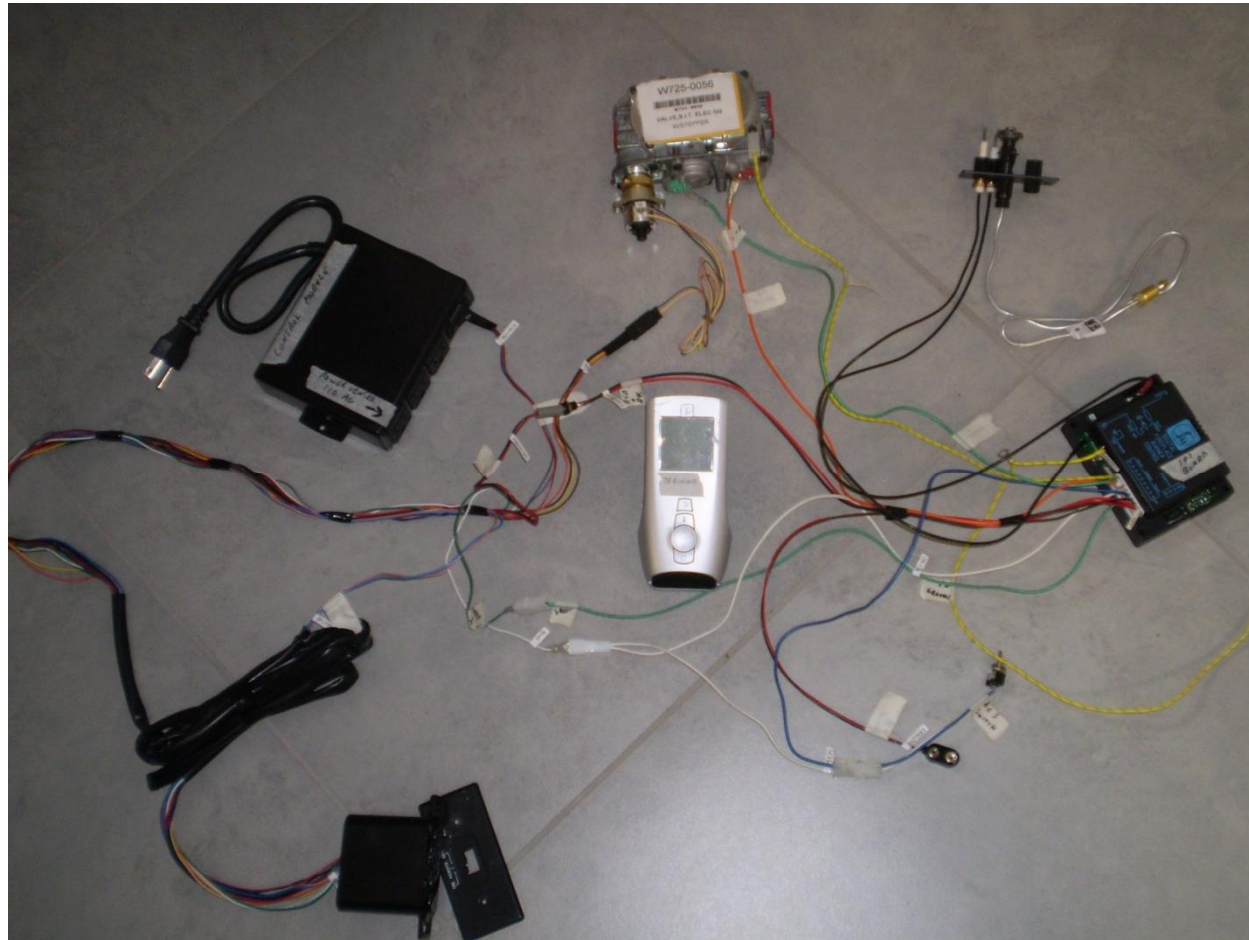


DEXEN PILOT ASSEMBLY



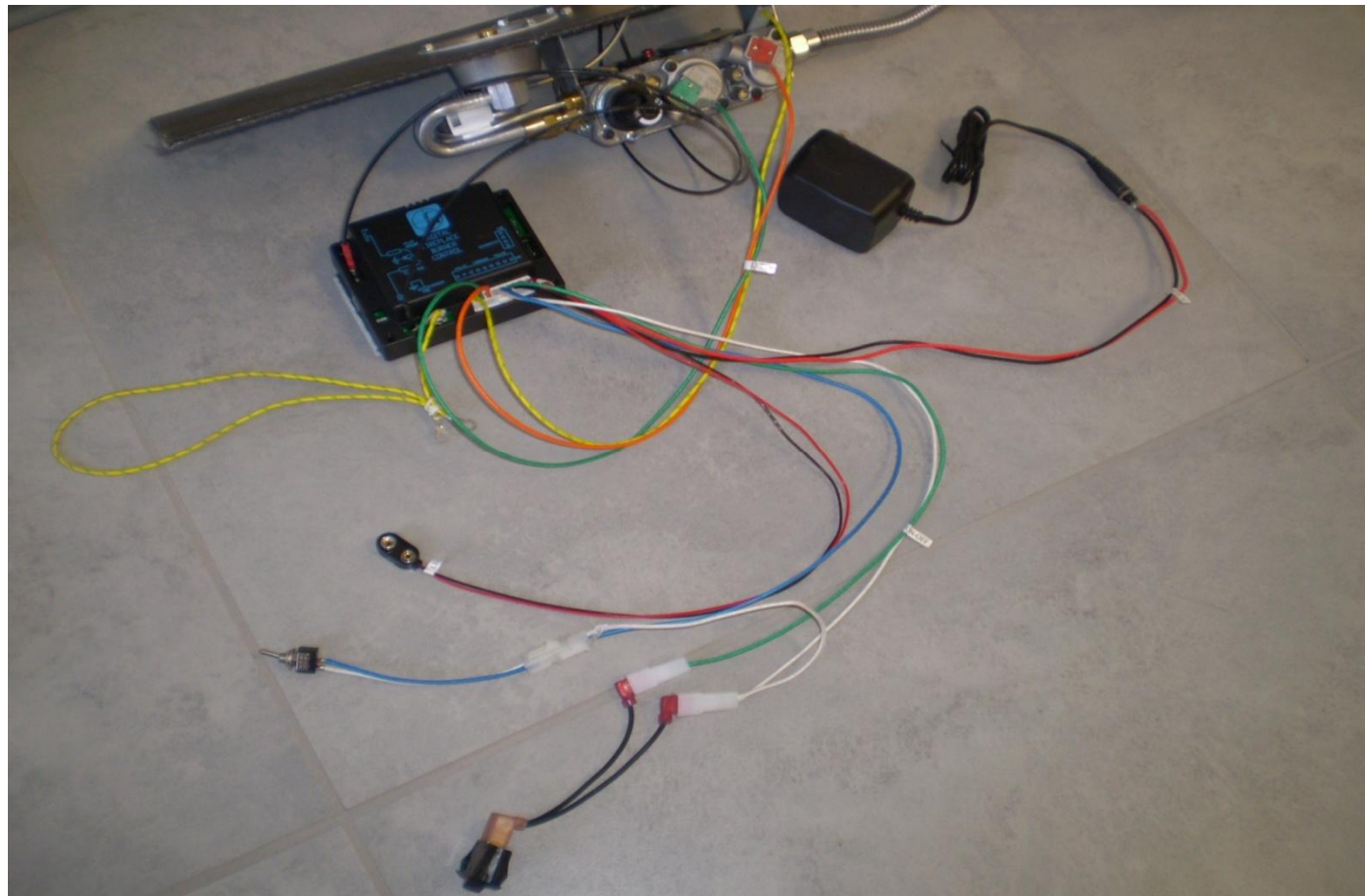
PROFLAME SIT SYSTEM

LHD50-HD81

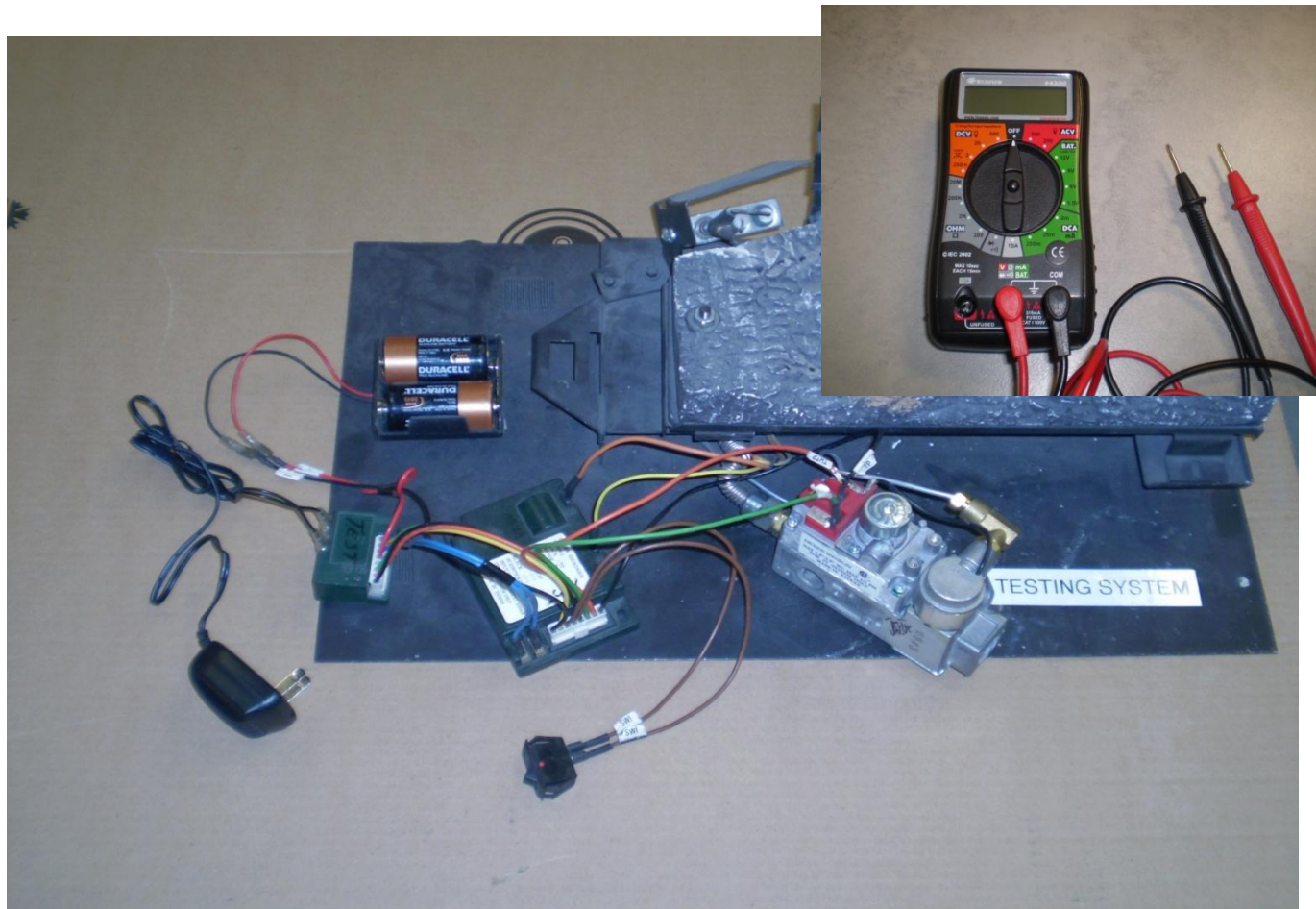


SIT EI SYSTEM

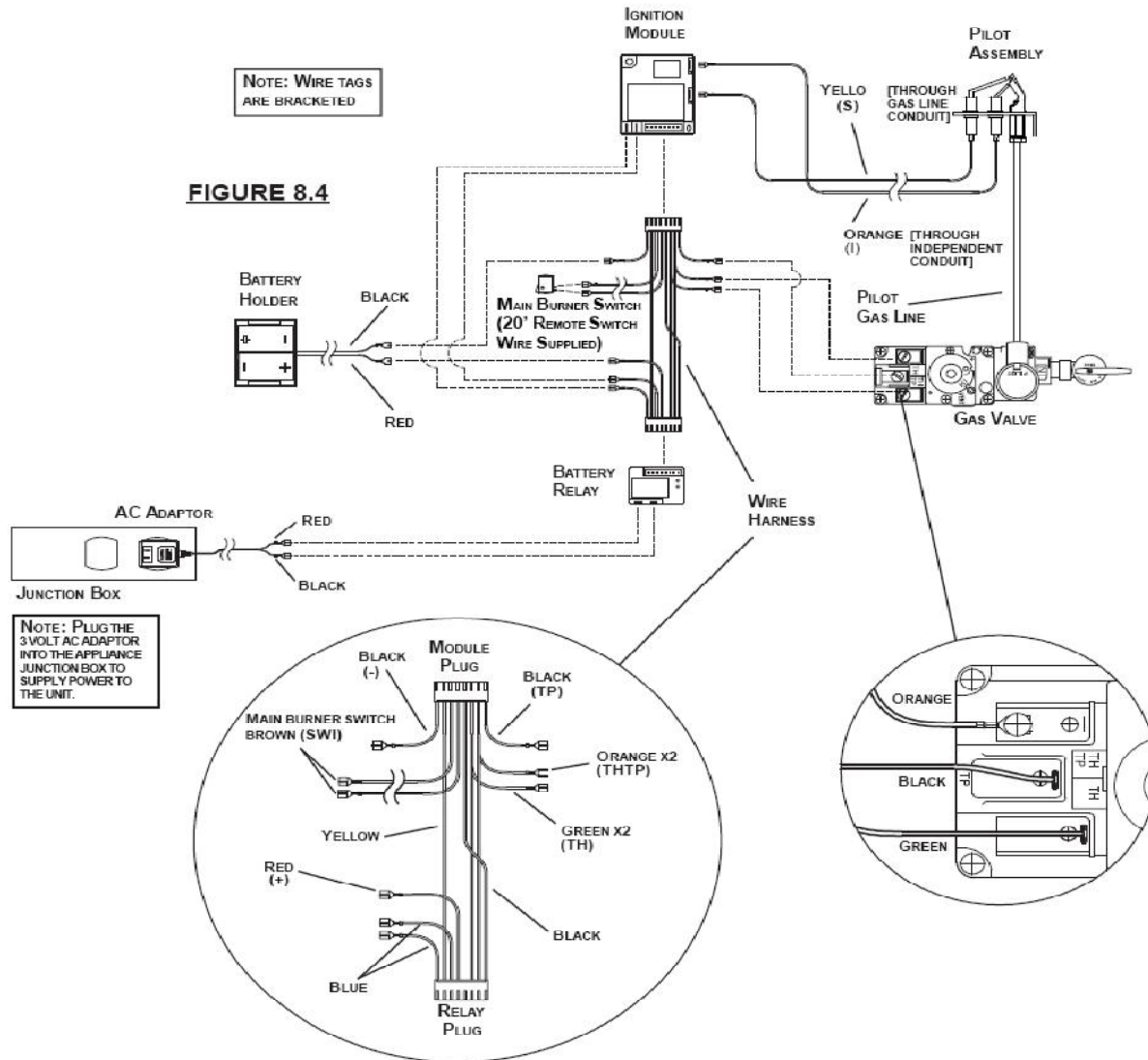
GDS60- GDI30-LHD45

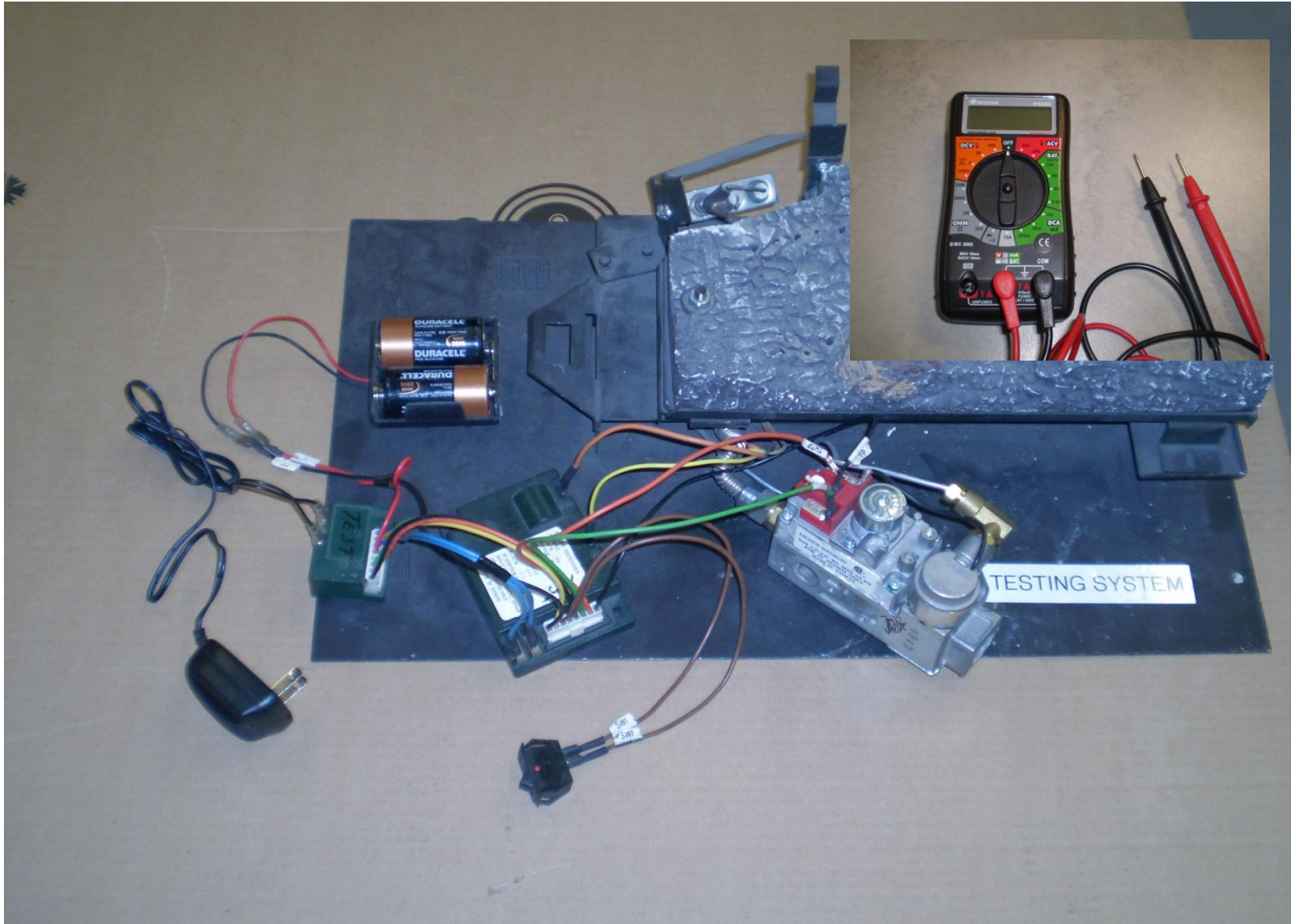


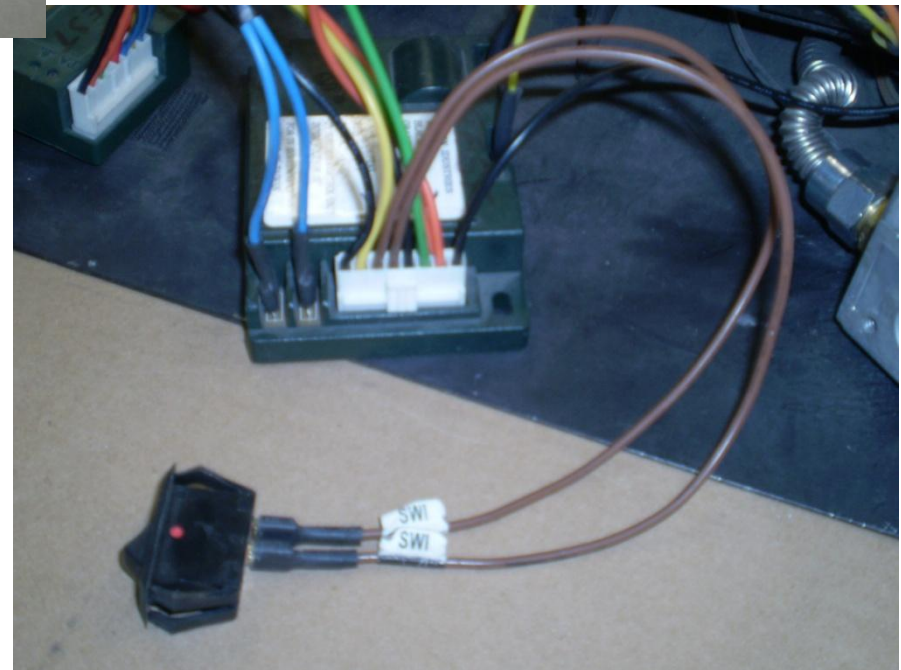
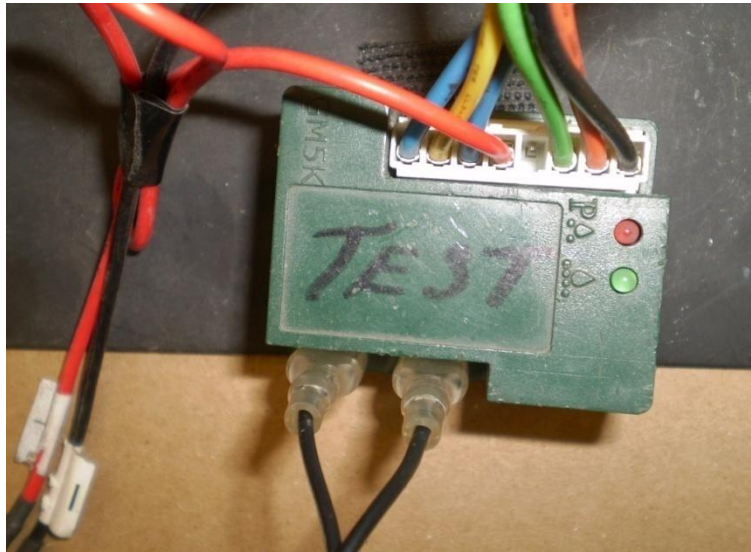
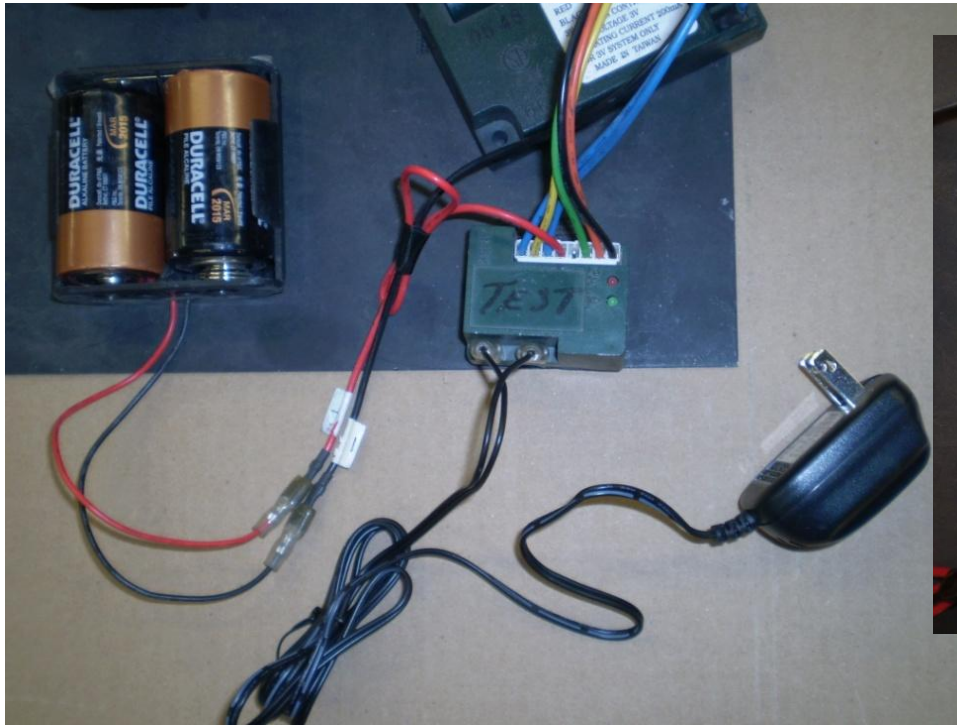
DEXEN EI SYSTEM



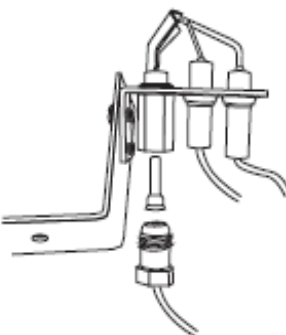
HD 35-40-46



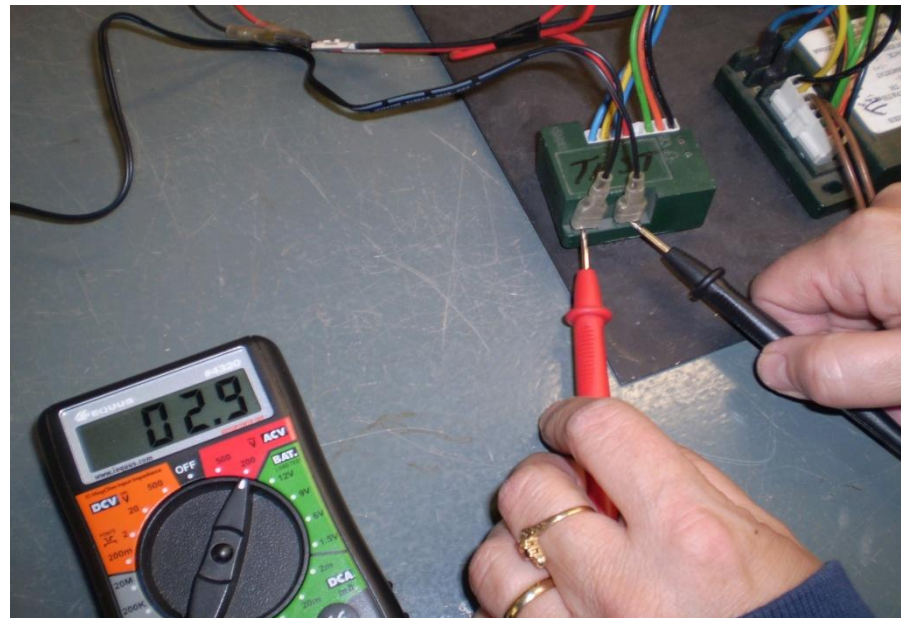
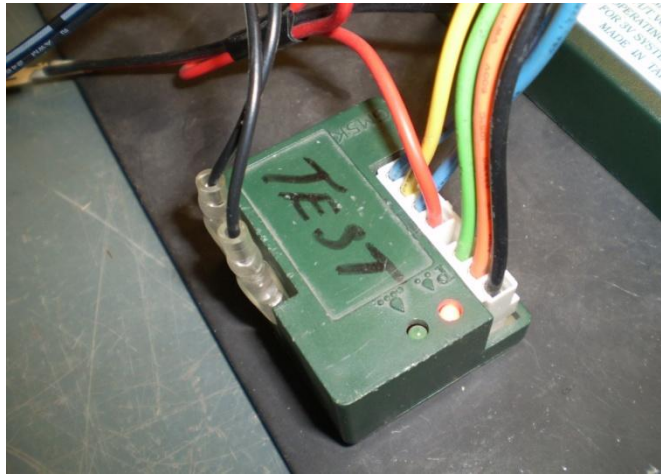


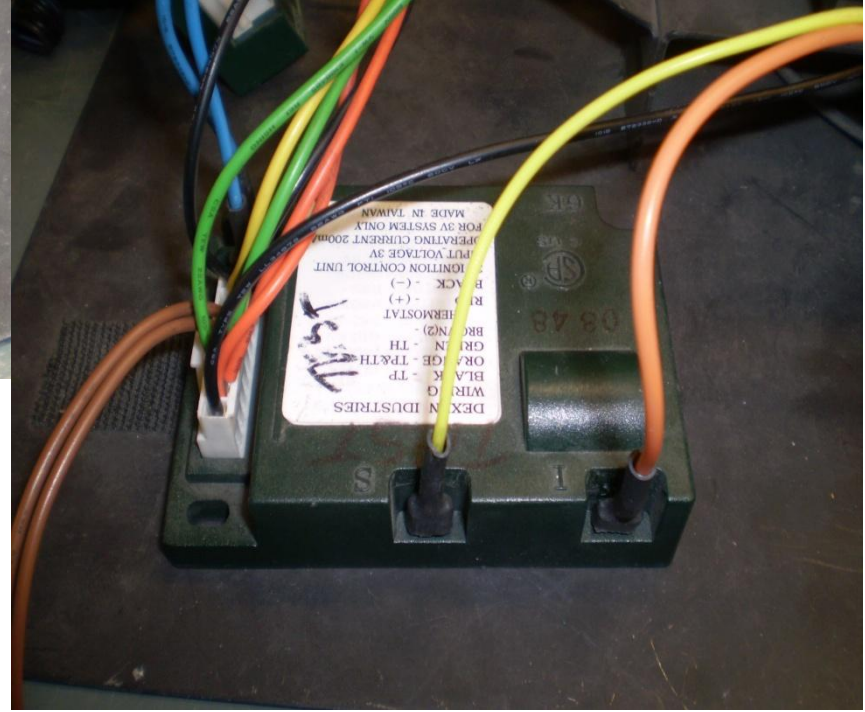
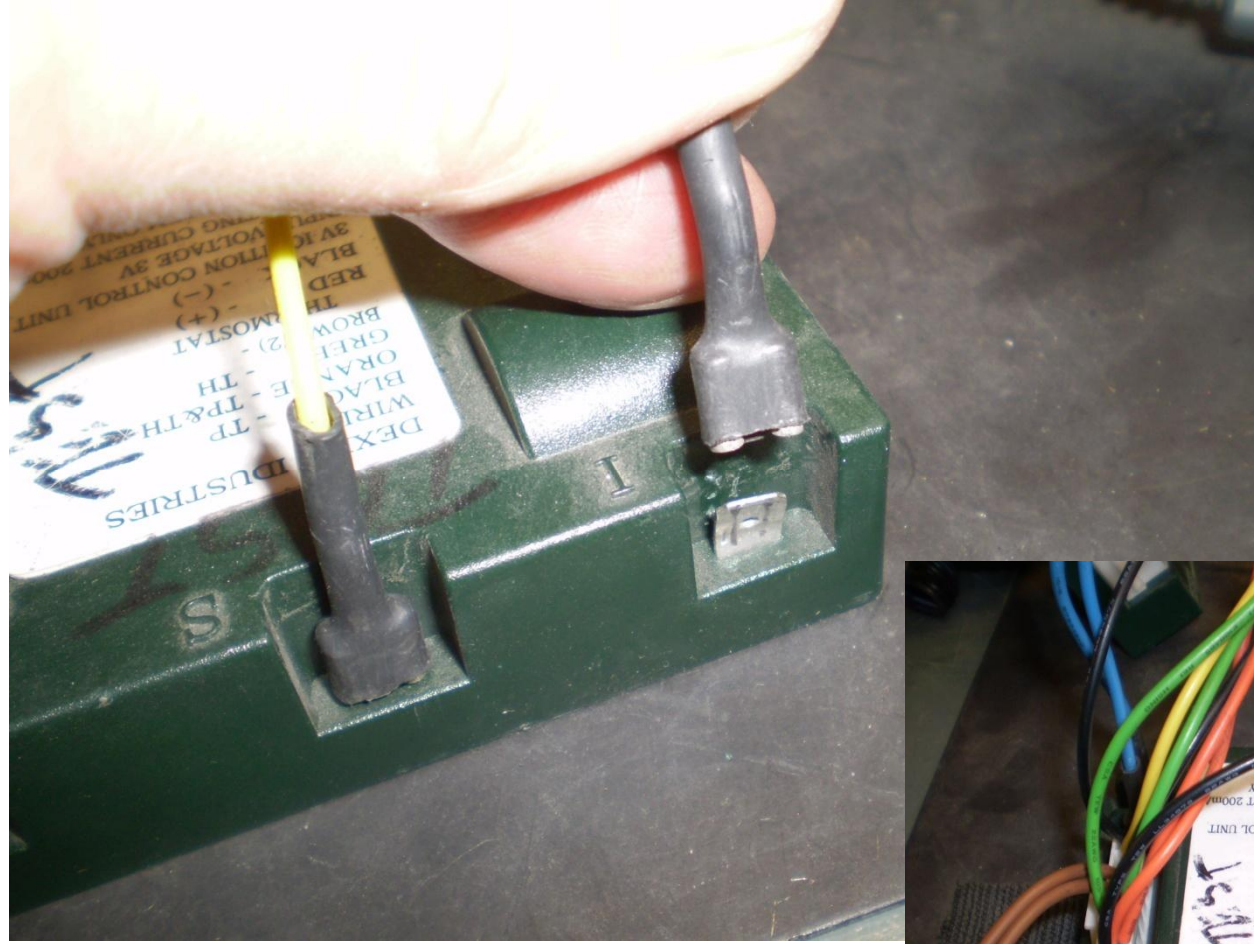




SYMPTOM	PROBLEM	TEST SOLUTION
Pilot will not light.	Wiring.	- Verify the "S" wire for the sensor and the "I" wire for the ignitor are connected to the terminals on the module and pilot assembly.
Makes noise with no spark at pilot burner.	Loose connection.	- Verify no loose connections, electrical shorts in the wiring or ground out to any metal object.
	Module.	- Turn the ON/OFF switch to the "OFF" position. Remove the igniter wire "I" from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" away from the "I" terminal on the module. If no spark, the module must be replaced. If there is a spark, the module is fine. Inspect pilot assembly for a shorted wire or cracked insulator around the electrode.
	Igniter Spark gap is incorrect.	- Spark gap of the ignitor to the pilot should be .12" or 1/8"
	Transformer.	- Verify the transformer is installed and plugged into the relay box. Check voltage of the transformer under load at the spade connections on the relay box with the ON/OFF switch in the "ON" position. Acceptable readings of a good transformer are between 2.8 and 3.4 volts A.C.
	A shorted or loose Connection.	- Remove and reinstall the wiring harness that plugs into the module. Remove and verify continuity of each wire in wiring harness.
	Battery backup	- Check batteries.
	Improper switch wiring.	- Troubleshoot the system with the simplest ON/OFF switch.

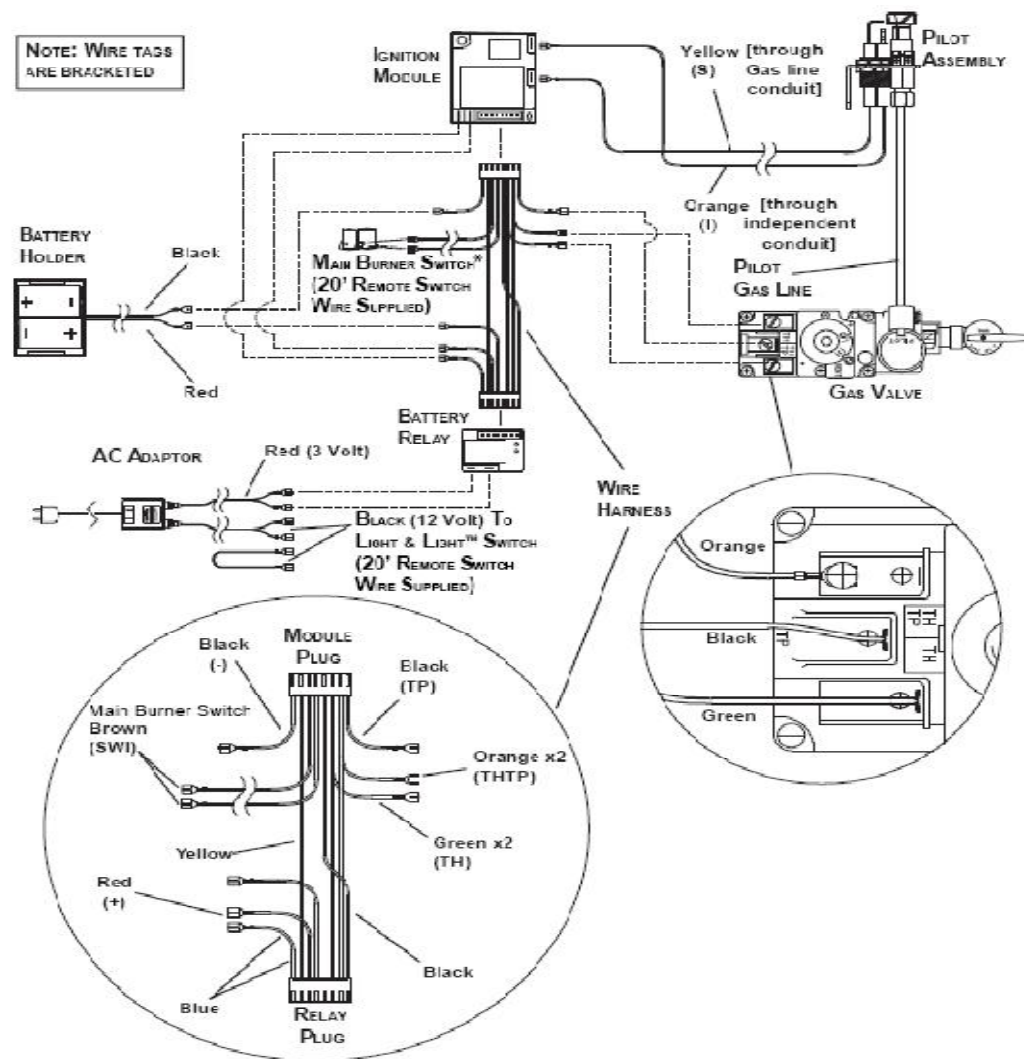
TEST THE AC POWER FROM THE TRANSFORMER 2.8 – 3.4 AC

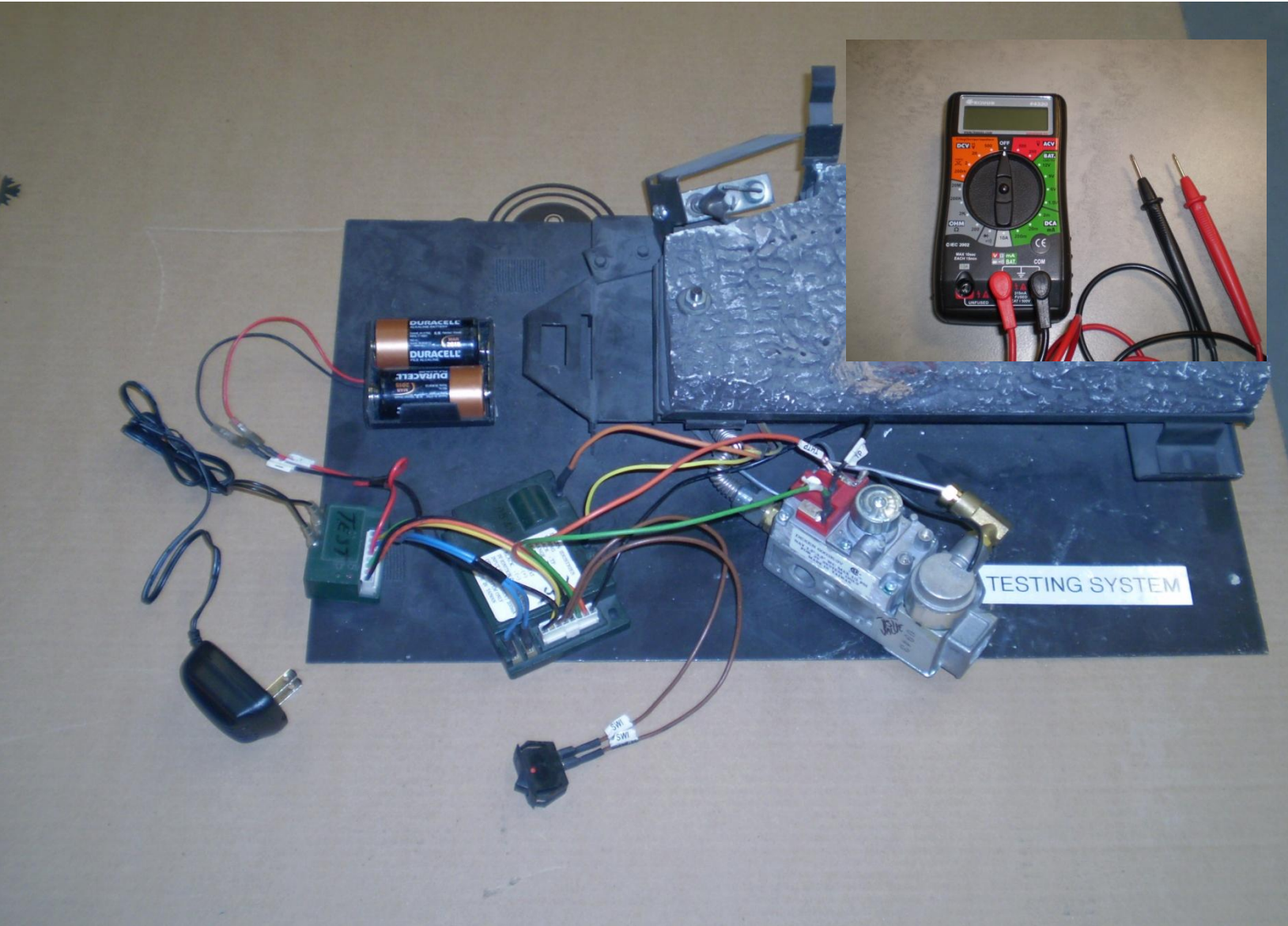


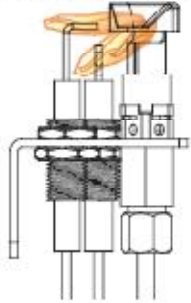


SYMPTOM	PROBLEM	TEST SOLUTION
Continues to spark and pilot lights, but main burner will not light.	Short or loose connection in sensor rod.	<ul style="list-style-type: none"> - Verify all connections. Verify the connections from the pilot assembly are tight; also verify these connections are not grounding out to any metal. - Verify the TH wires are connected to the valve.
	THTP	<ul style="list-style-type: none"> - Verify the THTP wires are connected to the valve.
	Poor flame rectification or contaminated sensor rod.	<ul style="list-style-type: none"> - Verify the flame is engulfing the sensor rod. This will increase the flame rectification. Verify correct pilot orifice is installed and inlet gas specifications to manual. (Remember, the flame carries the rectification current, not the gas. If the flame lifts from the pilot hood, the circuit is broken. A wrong orifice or too high of an inlet pressure can cause the pilot flame to lift). The sensor rod may need cleaning.
Pilot light stops sparking / pilot remains lit but burner will not turn on.	Wiring / connection.	<ul style="list-style-type: none"> - Inspect all wires, ensure good tight connections. Verify that all wiring is installed exactly as specified.
	Wiring harness.	<ul style="list-style-type: none"> - Inspect the wiring harness and verify the harness is tightly connected to the module. Verify that you have all wires connected and in the right order.
	Module or valve.	<ul style="list-style-type: none"> - Conduct the following test to verify if the problem is the module or valve. To measure voltages, turn the multimeter to "DC", place the red lead from the multimeter to the screw on the terminal block for the wire you are checking, touch black lead to ground (valve body). Importantly, a "zero" volts reading does not automatically indicate a bad module, there may be too little resistance in the valve solenoid. Check if the green wires is disconnected from the valve. The voltage output from the module should be between 1.5 and 3 volts.

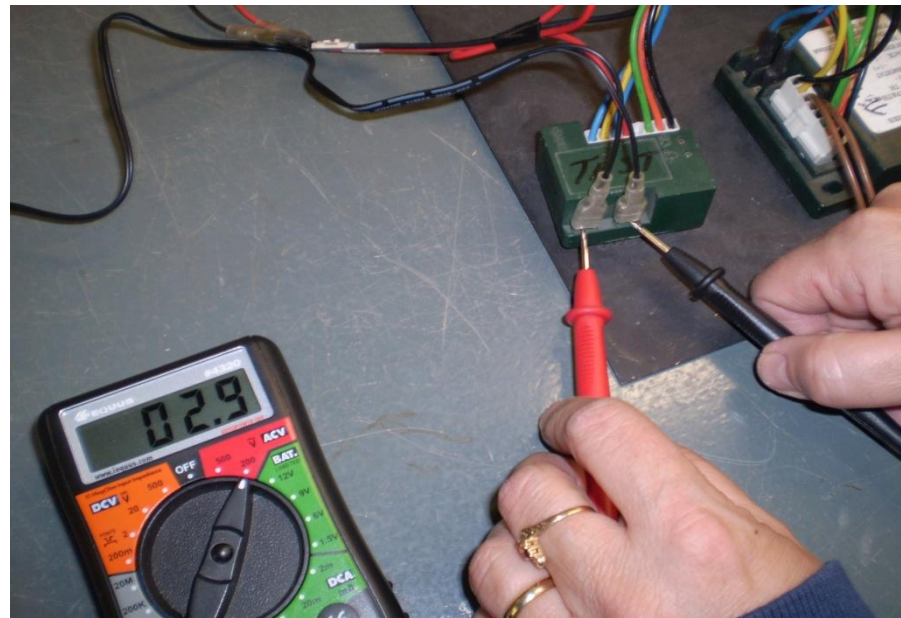
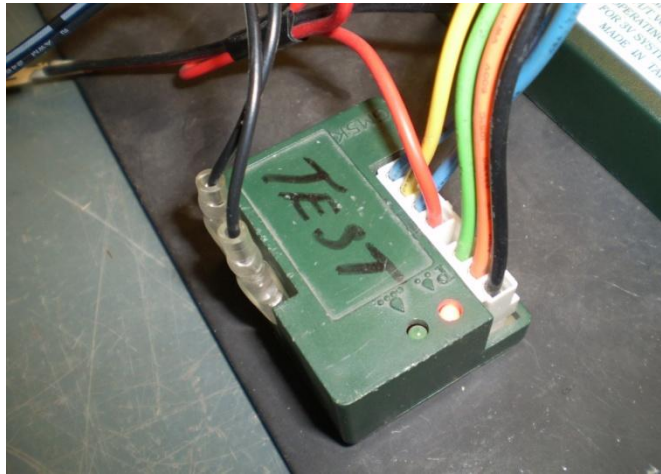
BGD36CFG CRYSTALLO

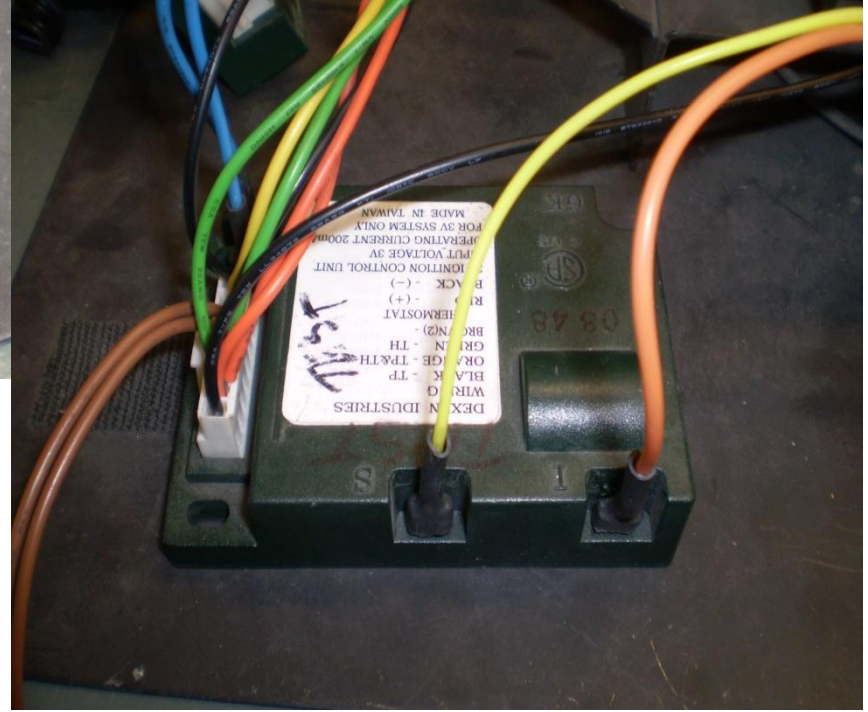
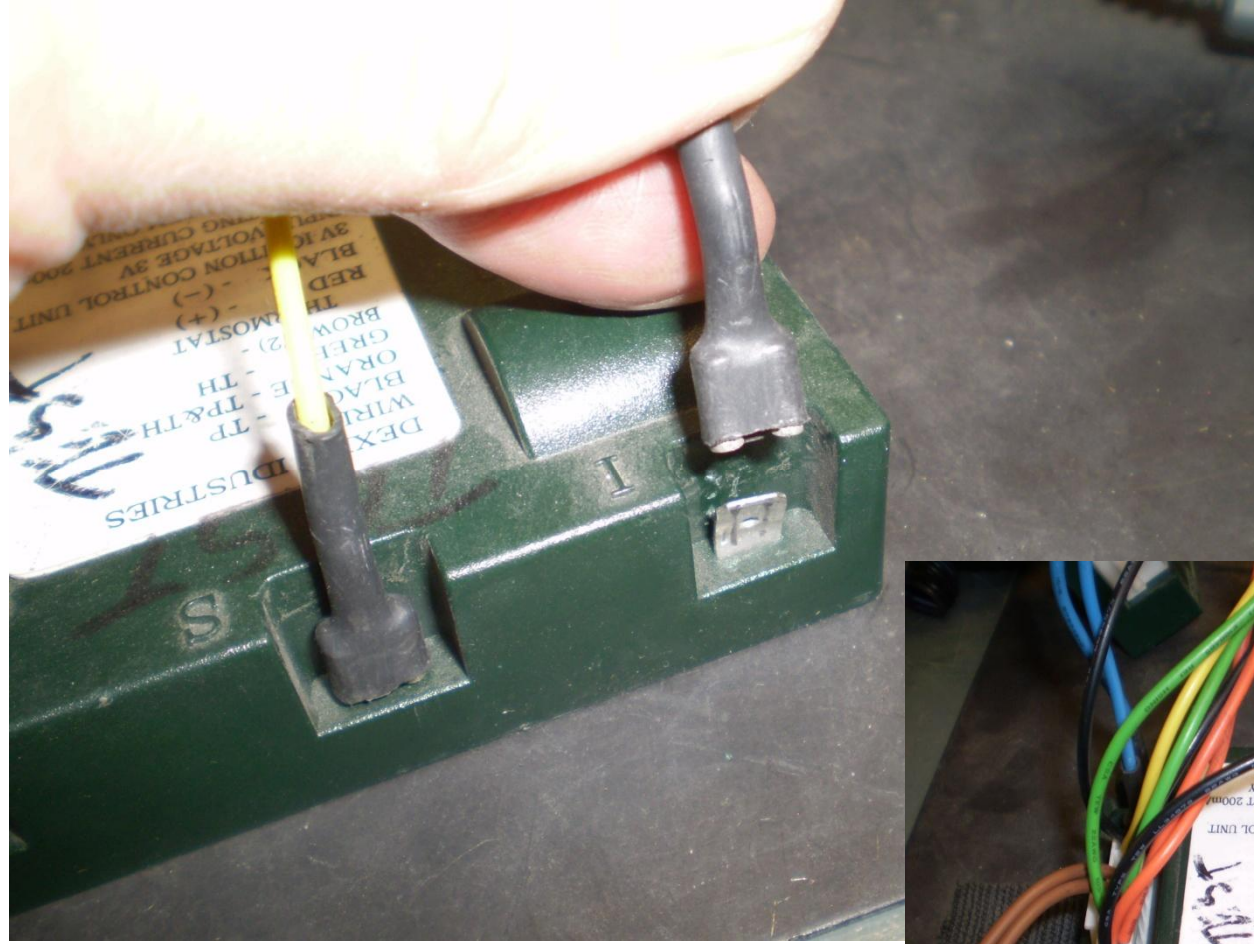




SYMPTOM	PROBLEM	TEST SOLUTION
Pilot will not light.	Wiring.	- Verify the "S" wire for the sensor and the "I" wire for the ignitor are connected to the correct terminals (not reverse) on the module and pilot assembly
	Loose connection.	- Verify no loose connections, electrical shorts in the wiring or ground out to any metal object.
Makes noise with no spark at pilot burner.	Module	- Turn the ON/OFF switch to the "OFF" position Remove the igniter wire "I" from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" away from the "I" terminal on the module. If no spark the "I" terminal module must be replaced. If there is a spark the "I" terminal is fine. Inspect pilot assembly for a shorted wire or cracked insulator around the electrode.
	Igniter Spark gap is incorrect.	- Spark gap of the ignitor to the pilot should be .17" tor 1/8"
	Transformer.	- Verty the transtormer is installed and plugged into the module. Check voltage of the transformer under load at the spade connections on the module with the ON/OFF switch in the "ON" position. Acceptable readings of a good transformer are between 3.2 and 2.8 volts A.C.
	A shorted or loose Connection.	- Remove and reinstall the wiring harness that plugs into the module. Remove and verify continuity of each wire in wiring harness.
Makes no noise with no spark at pilot burner.	Improper switch wiring.	- Troubleshoot the system with the simplest ON/OFF switch.
	Module is not grounded.	- Verify the value and pilot assemblies are properly grounded to the metal chassis of the fireplace or log set.
	Faulty module.	- Turn the ON/OFF switch to the "OFF" position. Remove the igniter wire "I" from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" away from the "I" terminal on the module. If no spark the "I" terminal module must be replaced. If there is a spark the "I" terminal is fi ne. Inspect pilot assembly for a shorted wire or cracked insulator around the electrode.

TEST THE AC POWER FROM THE TRANSFORMER 2.8 – 3.4 AC

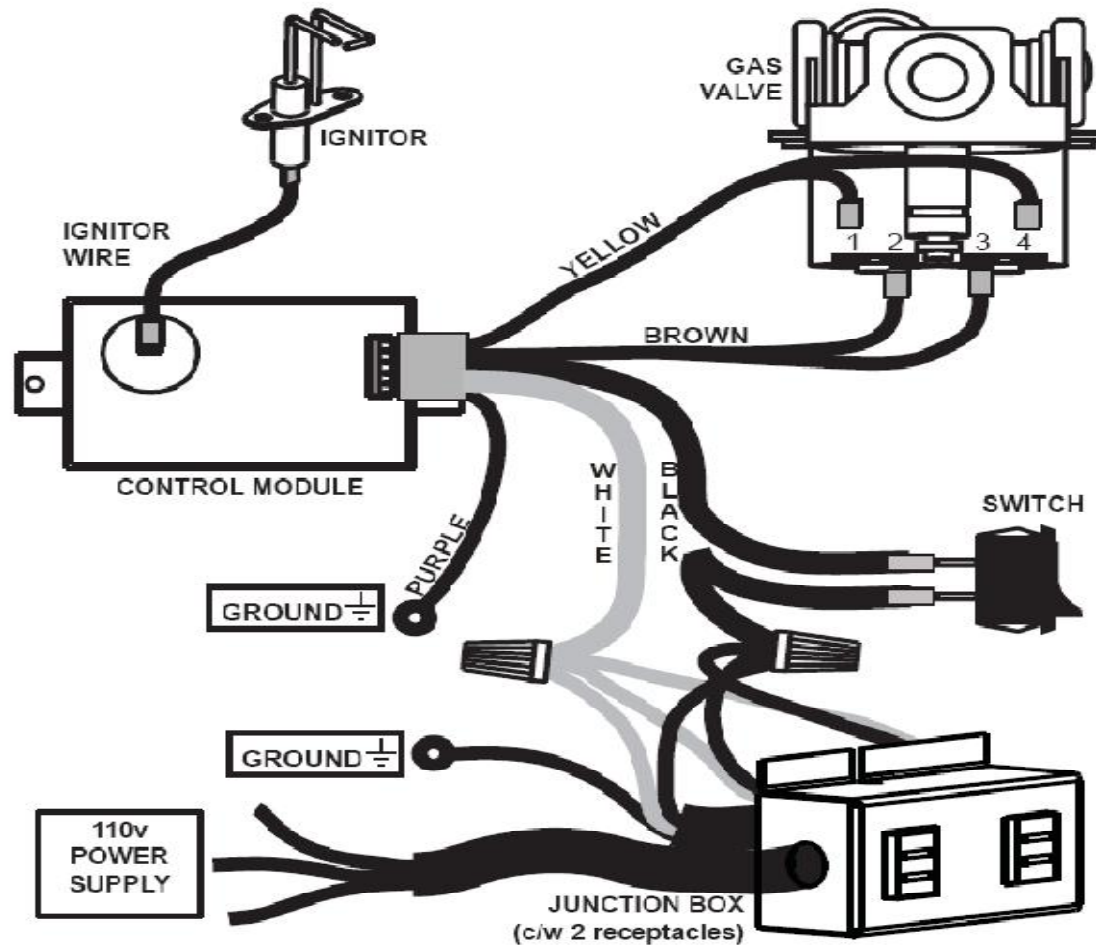


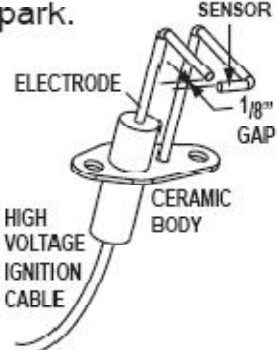


SYMPTOM	PROBLEM	TEST SOLUTION
Pilot sparks but will not light.	Gas supply.	<ul style="list-style-type: none"> - Verify that the incoming gas line ball valve is "Open". Verify that the inlet pressure reading is within acceptable limits, inlet pressures must not exceed 14" W.C.
	Module is not grounded.	<ul style="list-style-type: none"> - Verify the valve and pilot assemblies are properly grounded to the metal chassis of the fireplace or log set.
	Out of propane gas.	<ul style="list-style-type: none"> - Fill the tank.
Continues to sparks and pilot lights, but main burner will not light.	Short or loose connection in sensor rod.	<ul style="list-style-type: none"> - Verify all connections. Verify the connections from the pilot assembly are tight; also verify these connections are not grounding out to any metal.
	Poor flame rectification or contaminated sensor rod.	<ul style="list-style-type: none"> - Verify the flame is engulfing the sensor rod. This will increase the flame rectification. Verify correct pilot orifice is installed and inlet gas specifications to manual. (Remember, the flame carries the rectification current, not the gas. If the flame lifts from pilot hood, the circuit is broken. A wrong orifice or too high of an inlet pressure can cause the pilot flame to lift.) The sensor rod may need cleaning.
	Poor grounding between pilot assembly and gas valve.	<ul style="list-style-type: none"> - Verify that the wire harness is firmly connected to module. Verify that the ceramic insulator around the sensor rod is not cracked, damaged, or loose. Verify the connection from the sensor rod to the sensor wire.
	Damaged pilot or dirty sensor rod	<ul style="list-style-type: none"> - Clean sensor rod with an emery cloth to remove any contamination that may have accumulated on the sensor rod. Verify continuity with multimeter with ohms set at the lowest range.

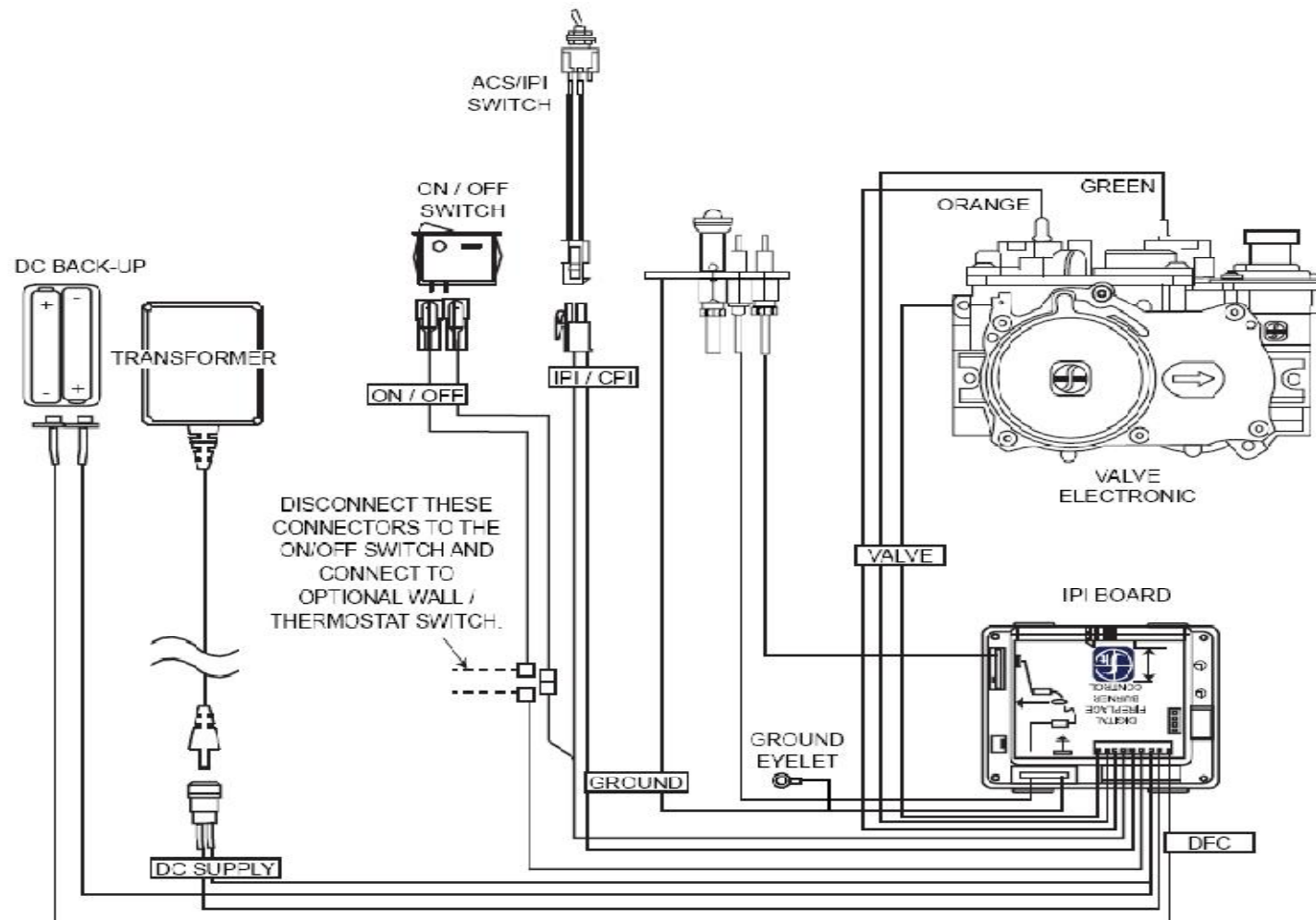
SYMPTOM	PROBLEM	TEST SOLUTION
Pilot lights Stops sparking / pilot remains lit but burner will not turn on.	Wiring / Connection.	<ul style="list-style-type: none"> - Inspect all wires, ensure good tight connections. Verify that all wiring is installed exactly as specified.
	Wiring harness.	<ul style="list-style-type: none"> - Inspect the wiring harness, and verify the harness is tightly connected to the module. Verify that you have 7 wires and they are connected in the right order.
	Module or Valve.	<ul style="list-style-type: none"> - Conduct the following test to verify if the problem is the module or valve. To measure voltages, turn multimeter to "DC" place the red lead from multimeter on the screw on the terminal block for the wire you are checking, touch black lead to ground (valve body). Importantly, a "Zero" volts reading does not automatically indicate a bad module, there may be too high resistance in the valve solenoid. Check the Green wire disconnected from valve that the voltage output from the module should be between 2 and 3 volts.

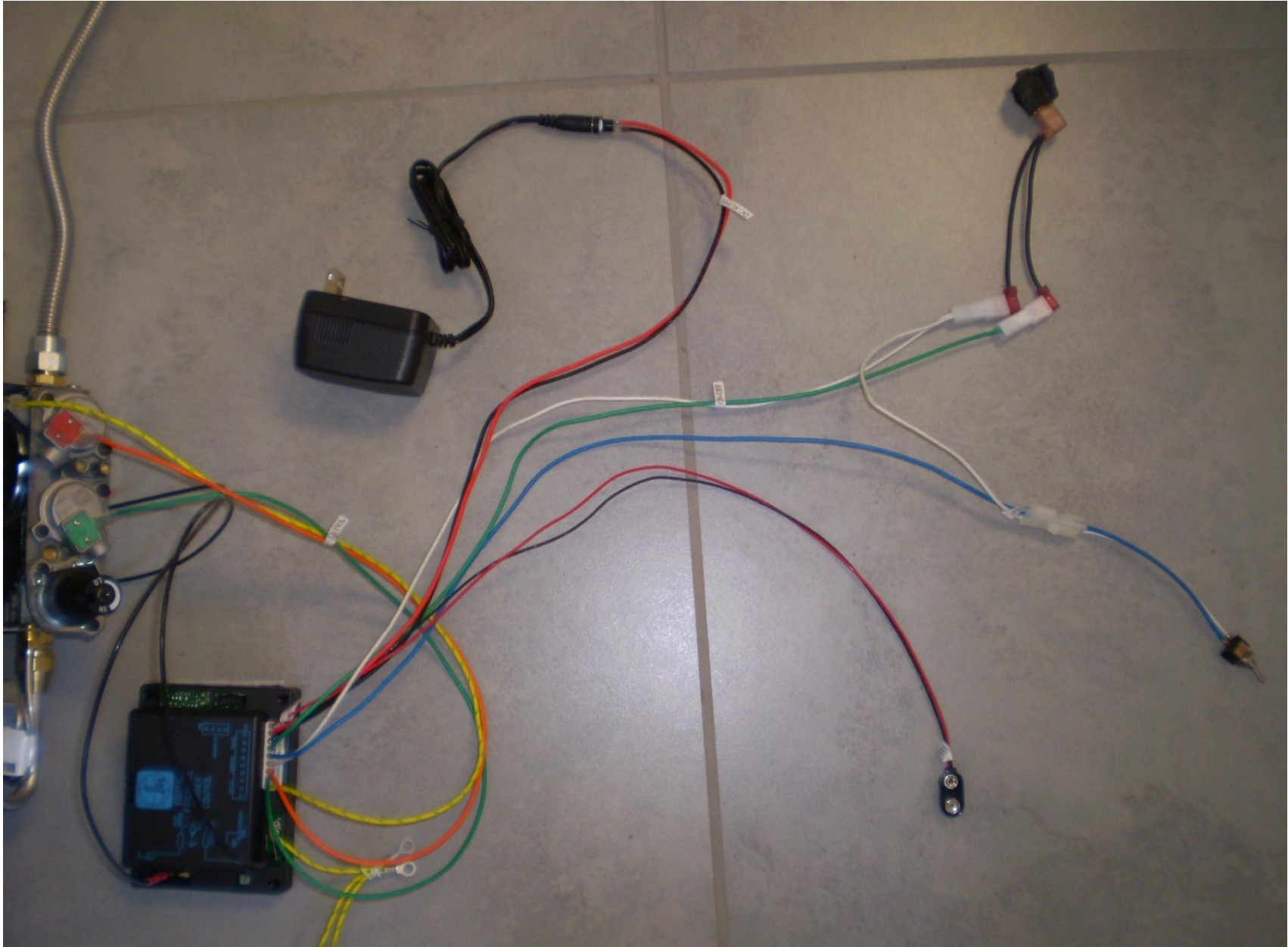
GT8 TORCH

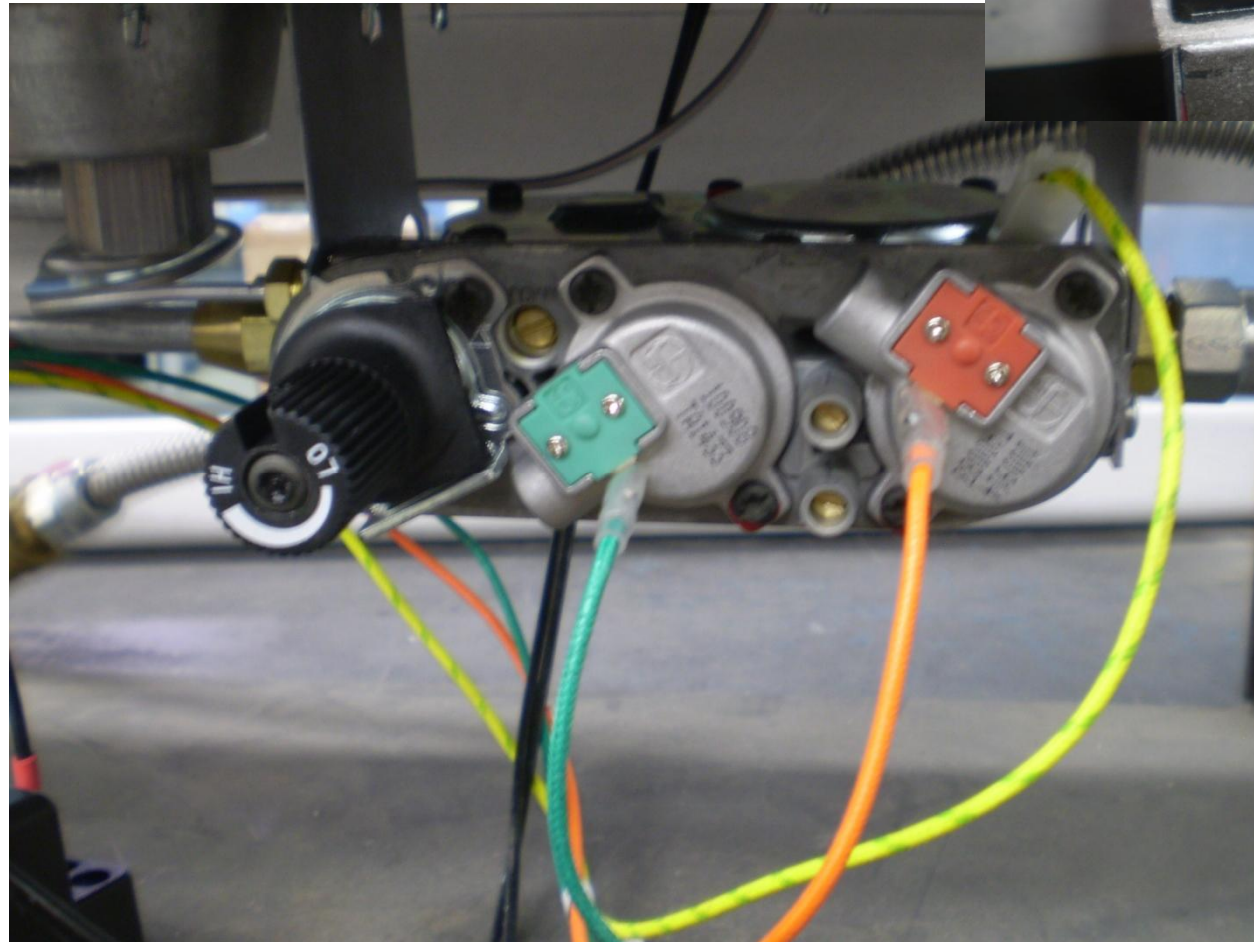


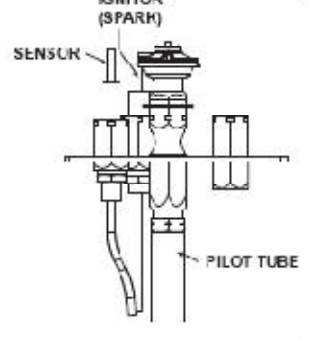
SYMPTOM	PROBLEM	TEST SOLUTION
<p>Electrode sparks, burner ignites, electrode continues to spark for complete 7 seconds, burner shuts down.</p>	<p>Hot and neutral wires are reversed at control module.</p>	<ul style="list-style-type: none"> - Connect the hot wire to the black wire. Connect the neutral wire to the white wire.
	<p>Sensor / flame not connecting</p>	<ul style="list-style-type: none"> - Raise electrode / sensor up into flame.
<p>Ignitor will not spark.</p> 	<p>No spark at ignitor.</p>	<ul style="list-style-type: none"> - Check the power source. (ie. fuse, circuit breaker) - Check that the wire is connected to both the ignitor and the control module. - Check that the spark is not jumping to ignitor cover. - Replace the wire if the wire insulation is broken or frayed. - Replace the electrode if the ceramic insulator is cracked or broken.
	<p>Spark gap is incorrect.</p>	<ul style="list-style-type: none"> - Spark gap should be 0.125" (1/8" approx.) from the electrode tip to the sensor tip.

GDI30 G

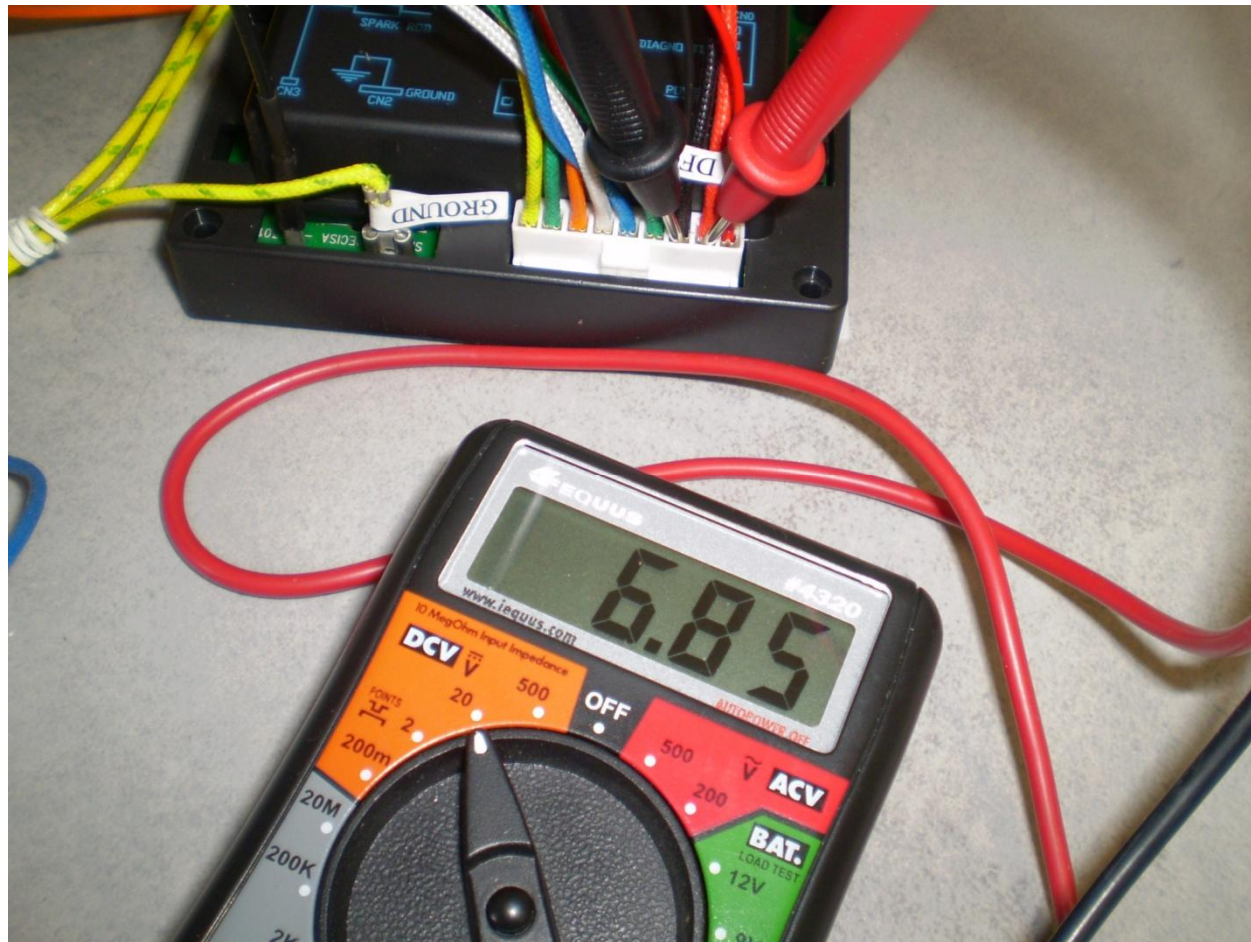


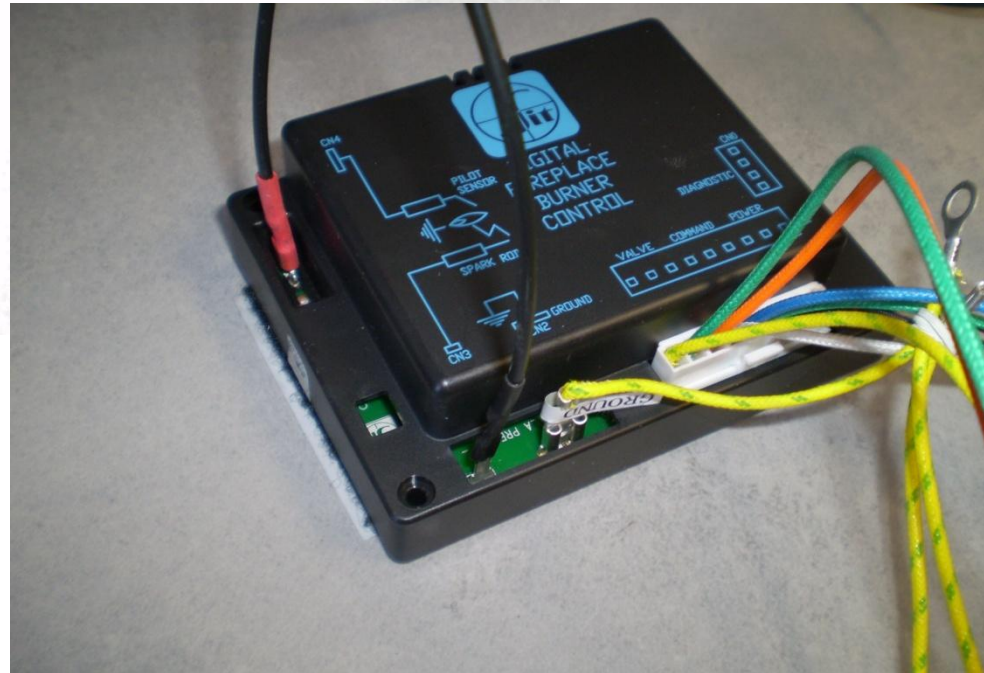
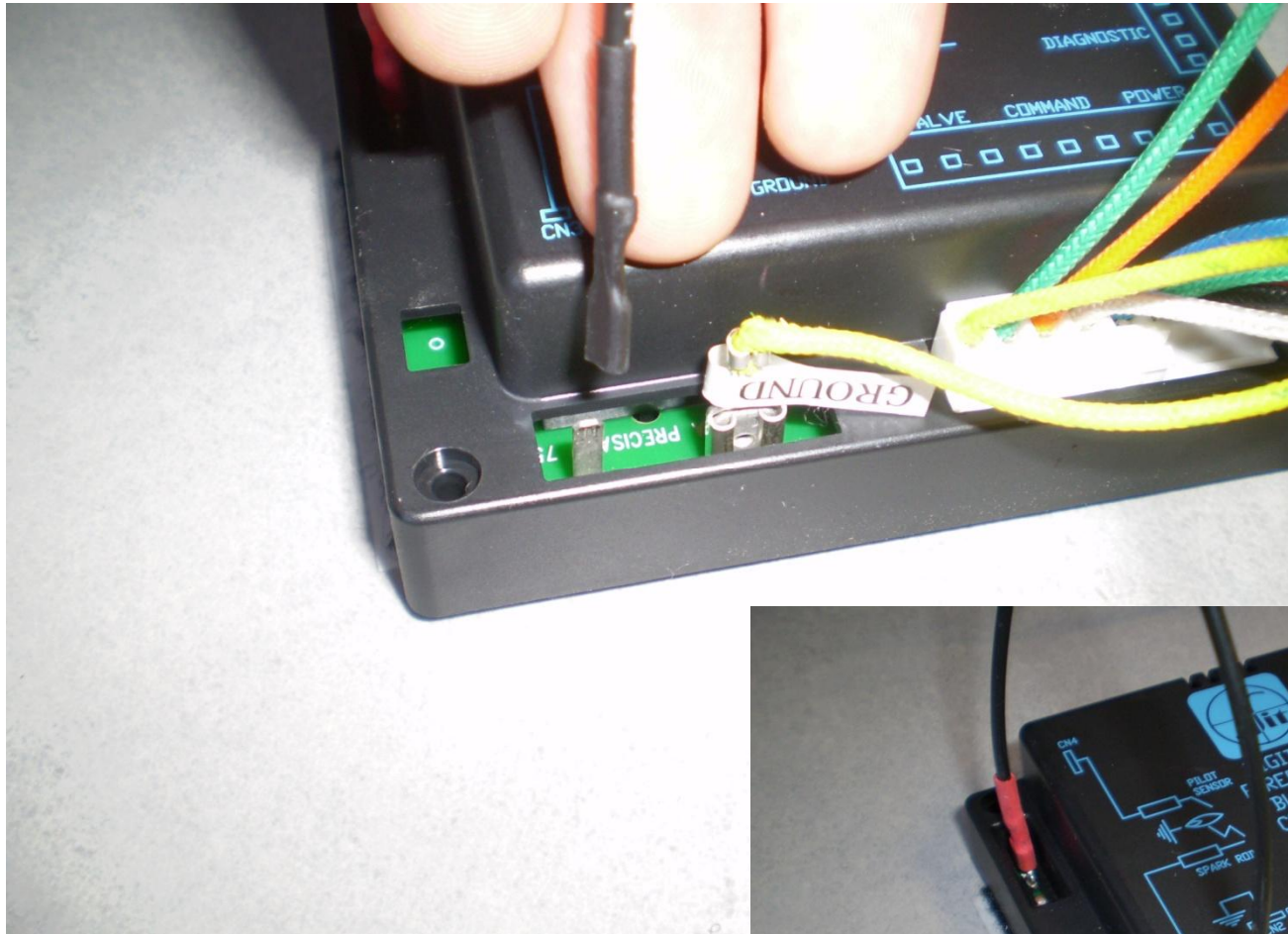




SYMPTOM	PROBLEM	TEST SOLUTION
Pilot will not light. Makes noise with no spark at pilot burner.	Wiring.	<ul style="list-style-type: none"> - Verify the wire for the sensor and the wire for the ignitor are connected to the correct terminals (not reversed) on the module. NOTE: Sensor has 3/16" connection and Ignitor has 1/8" connection.
	Loose connection.	<ul style="list-style-type: none"> - Verify no loose connections, electrical shorts in the wiring or ground out to any metal object.
	Module.	<ul style="list-style-type: none"> - Turn the ON/OFF switch to the "OFF" position. Remove the ignitor wire from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" away from the ignitor (spark) terminal on the module. If no spark the ignitor terminal module must be replaced. If there is a spark the ignitor terminal is fine. Inspect pilot assembly for a shorted wire or cracked Insulator around the electrode.
	Igniter Spark gap is incorrect.	<ul style="list-style-type: none"> - Spark gap of the ignitor to the pilot should be 1/8".
	Transformer.	<ul style="list-style-type: none"> - Verify the transformer is installed and plugged into the module. Check voltage of the transformer under load at the spade connections on the module with the ON/OFF switch in the "ON" position. Acceptable readings of a good transformer are between 6.2 and 7.0 volts A.C.
	Battery backup	<ul style="list-style-type: none"> - Check batteries.
	A shorted or loose Connection.	<ul style="list-style-type: none"> - Remove and reinstall the wiring harness that plugs into the module. Remove and verify continuity of each wire in wiring harness.
	Improper switch wiring.	<ul style="list-style-type: none"> - Troubleshoot the system with the simplest ON/OFF switch.
	Module is not grounded.	<ul style="list-style-type: none"> - Verify the value and pilot assemblies are properly grounded to the metal chassis of the appliance or in a set

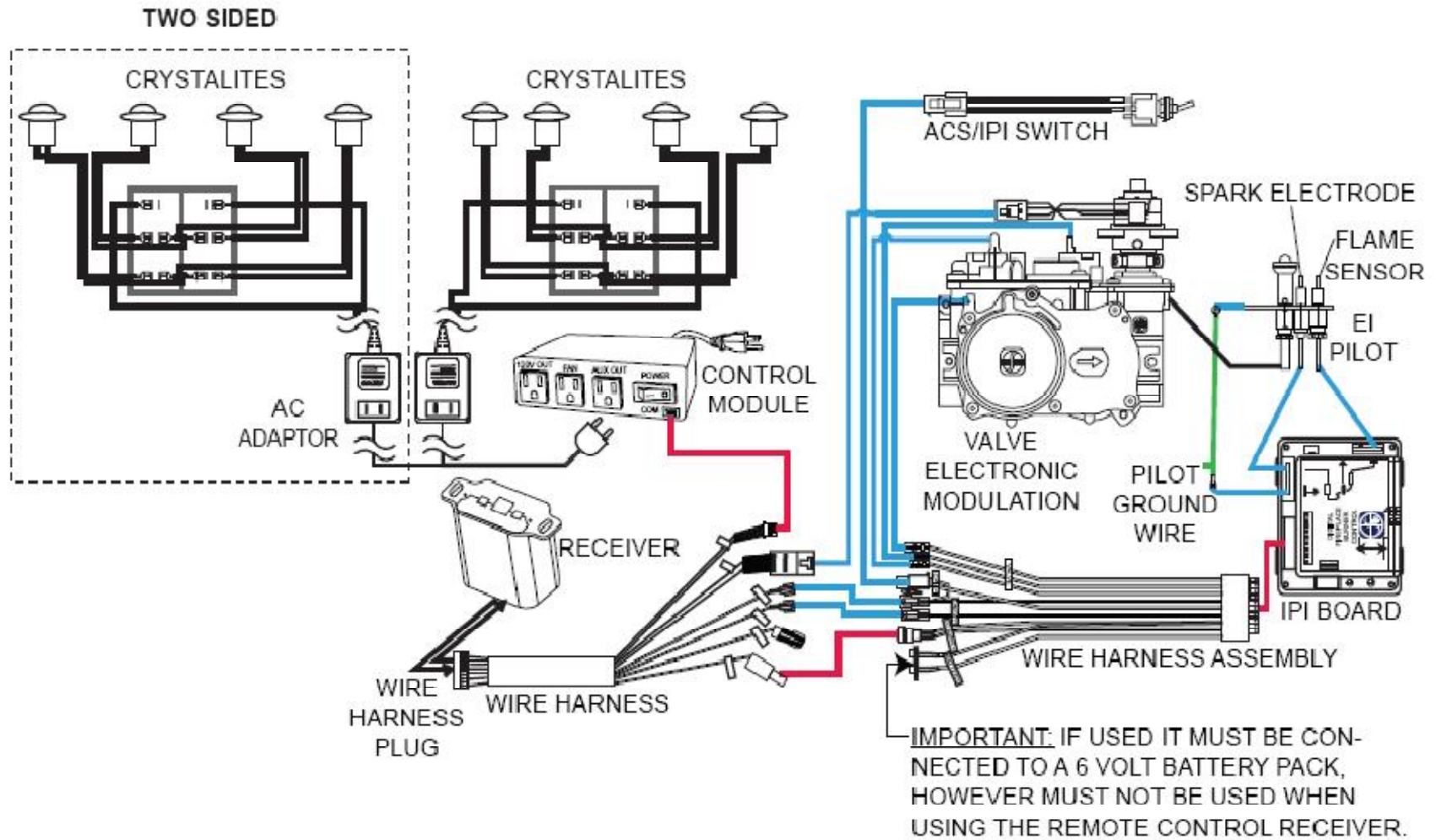
TRANSFORMER OUTPUT UNDER LOAD 6.2- 7.0 DC



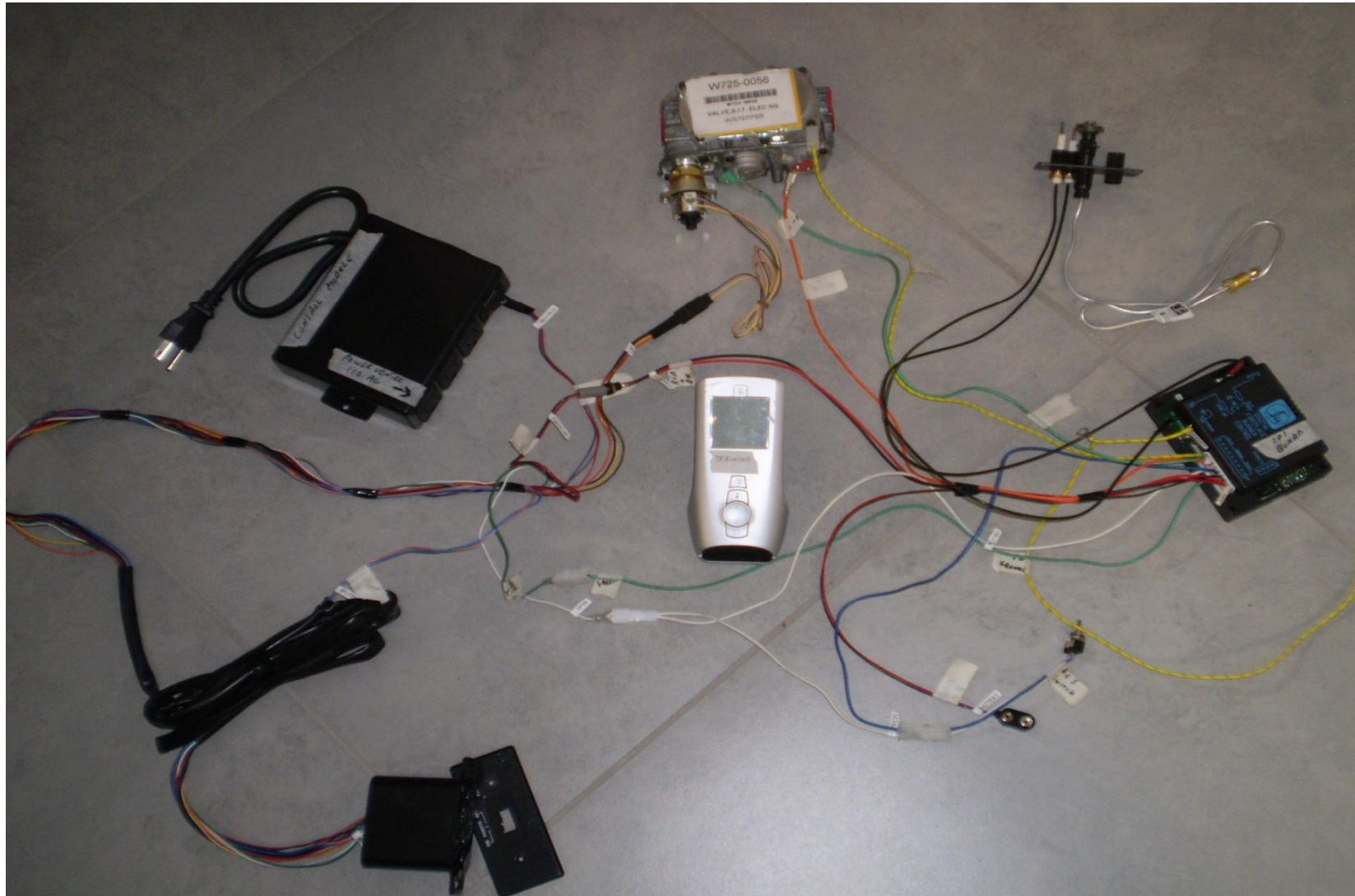


SYMPTOM	PROBLEM	TEST SOLUTION
Continues to spark and pilot lights, but main burner will not light.	Short or loose connection in sensor rod.	- Verify all connections. Verify the connections from the pilot assembly are tight; also verify these connections are not grounding out to any metal.
	Poor flame rectification or contaminated sensor rod.	- Verify the flame is engulfing the sensor rod. This will increase the flame rectification. Verify correct pilot orifice is installed and inlet gas specifications to manual. (Remember, the flame carries the rectification current, not the gas. If the flame lifts from pilot hood, the circuit is broken. A wrong orifice or too high of an inlet pressure can cause the pilot flame to lift.) The sensor rod may need cleaning.
	Poor grounding between pilot assembly and gas valve.	- Verify that the wire harness is firmly connected to module. Verify that the ceramic insulator around the sensor rod is not cracked, damaged, or loose. Verify the connection from the sensor rod to the sensor wire.
	Damaged pilot or dirty sensor rod.	- Clean sensor rod with an emery cloth to remove any contamination that may have accumulated on the sensor rod. Verify continuity with multimeter with ohms set at the lowest range.
Pilot lights Stops sparking / pilot remains lit but burner will not turn on.	Wiring / Connection.	- Inspect all wires, ensure good tight connections. Verify that all wiring is installed exactly as specified.
	Wiring harness.	- Inspect the wiring harness, and verify the harness is tightly connected to the module. Verify that all wires are connected in the right order. See "WIRING DIAGRAM" section.

LHD50



COMPLETE LHD50 WIRING



SIT PROFLAME VALVE



CONTROL MODULE



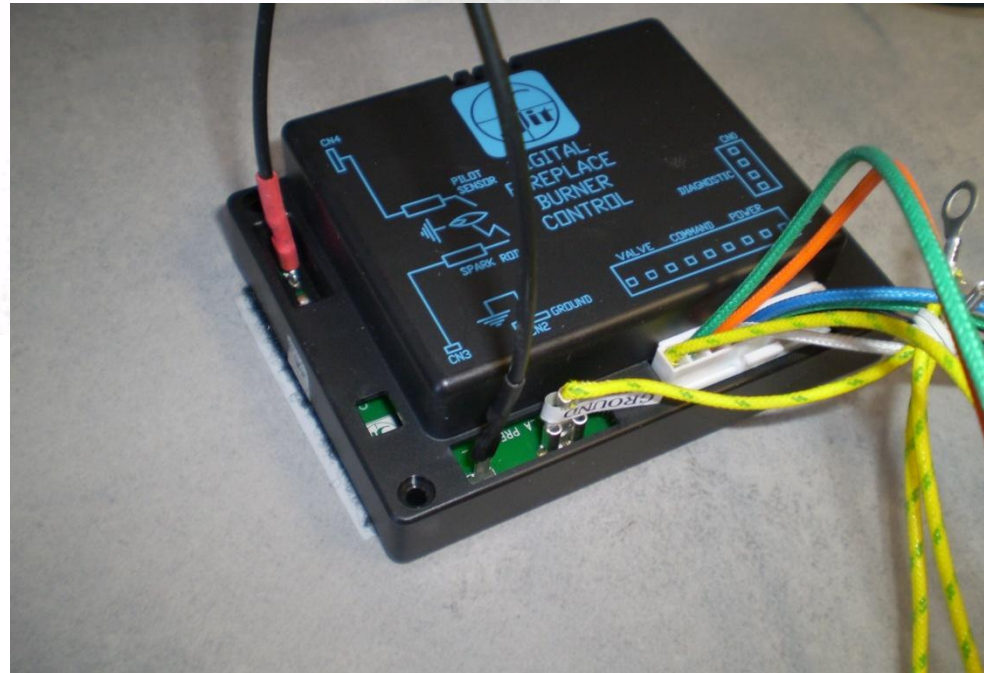
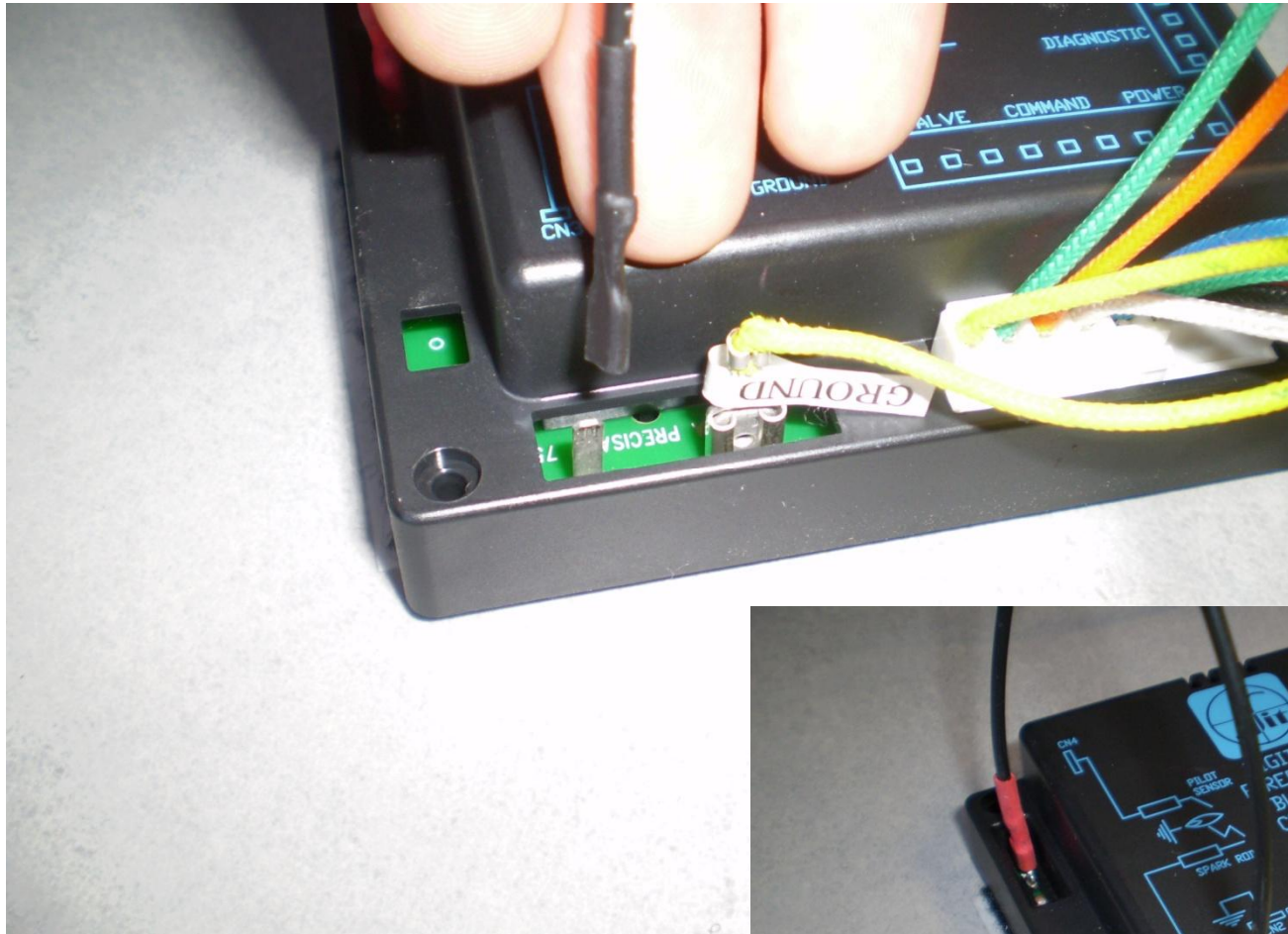
SIT RECEIVER



SIT IPI BOARD



SYMPTOM	PROBLEM	TEST SOLUTION
Pilot sparks but will not light.	Gas supply.	<ul style="list-style-type: none"> - Verify that the incoming gas line ball valve is "Open". - Verify that the inlet pressure reading is within acceptable limits, inlet pressures must not exceed 14" W.C.
	Module is not grounded.	<ul style="list-style-type: none"> - Verify the valve and pilot assemblies are properly grounded to the metal chassis of the fireplace.
	Out of propane gas.	<ul style="list-style-type: none"> - Fill the tank.
Continues to spark and pilot lights, but main burner will not light.	Short or loose connection in sensor rod.	Verify all connections. Verify the connections from the pilot assembly are tight; also verify these connections are not grounding out to any metal.
	Poor flame rectification or contaminated sensor rod.	<ul style="list-style-type: none"> - Verify the flame is engulfing the sensor rod. This will increase the flame rectification. Verify correct pilot orifice is installed and inlet gas specifications to manual. (Remember, the flame carries the rectification current, not the gas. If the flame lifts from pilot hood, the circuit is broken. A wrong orifice or too high of an inlet pressure can cause the pilot flame to lift.) The sensor rod may need cleaning.
	Poor grounding between pilot assembly and gas valve.	<ul style="list-style-type: none"> - Verify that the wire harness is firmly connected to module.
	Damaged pilot or dirty sensor rod.	<ul style="list-style-type: none"> - Verify that the ceramic insulator around the sensor rod is not cracked, damaged, or loose. Verify the connection from the sensor rod to the sensor wire. Clean sensor rod with an emery cloth to remove any contamination that may have accumulated on the sensor rod. Verify continuity with multimeter with ohms set at the lowest range.



SYMPTOM

PROBLEM

TEST SOLUTION

Pilot will not light.
Makes no noise
with no spark
at pilot burner.
Crystalites™ and
(optional) blower
operates.

A shorted or loose
connection.

- Remove and reinstall the wiring harness that plugs into the module.
- Remove and verify continuity of each wire in the wiring harness.

Module is not grounded.

- Verify the valve and pilot assemblies are properly grounded to the metal chassis of the fireplace.

Ignition box has been
locked out.

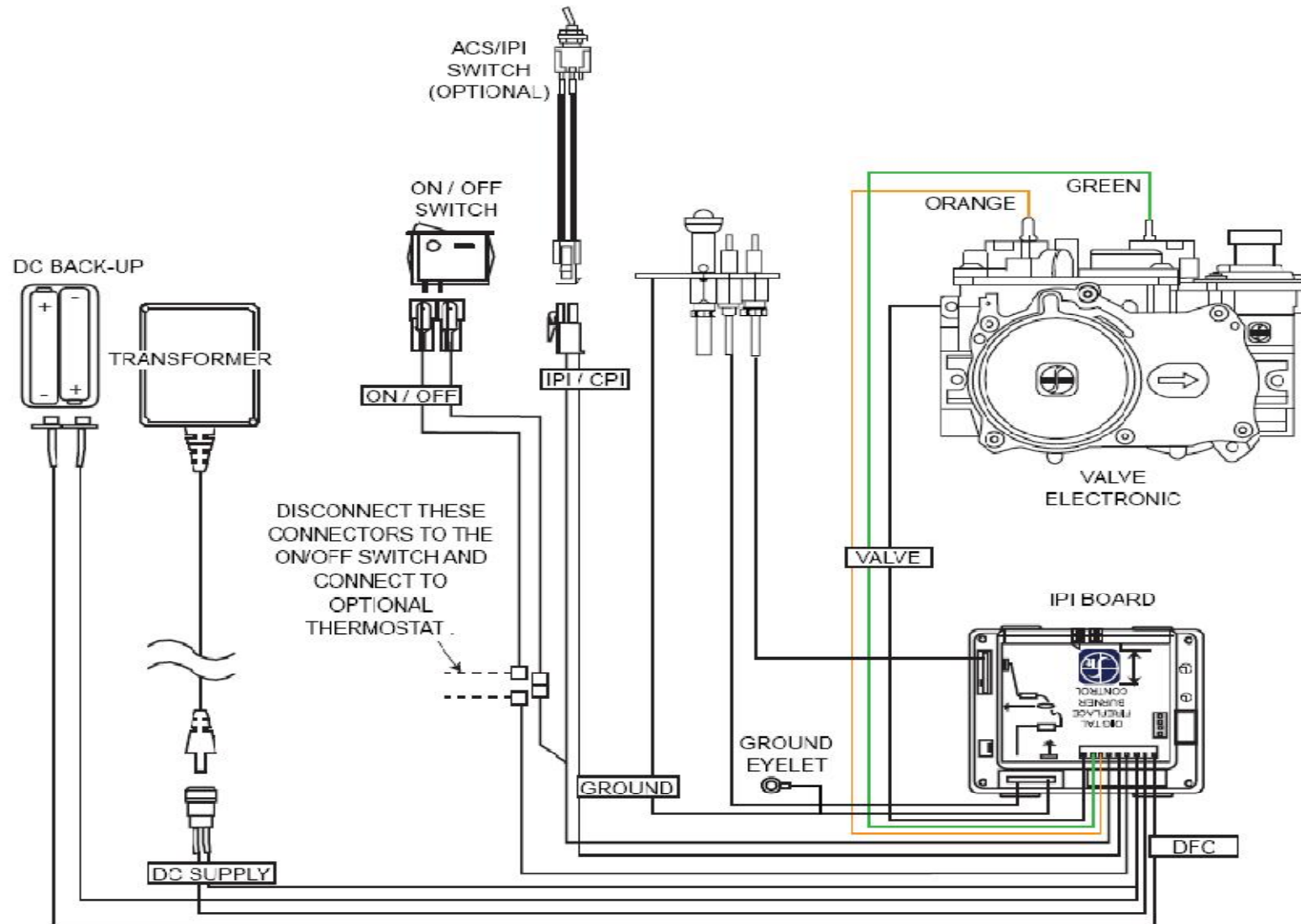
- Choose one of the 4 methods below to reset the system.
1. To reset ignition box when locked out. Turn off power supply and remove batteries (if used) from the receiver.
 2. To reset the DFC Board when the board goes into a lock out condition and the LED is blinking 3 times using the transmitter ON/OFF button:
Step 1: Turn the system off by pressing the ON/OFF button to turn the system off.
Step 2: After approximately 2 seconds press the ON/OFF button on the transmitter again. THE DFC Board will reset and the ignition sequence will start again.
 3. To reset the DFC Board when the board goes into a lock out condition and the LED is blinking 3 times by cycling flame:
Step 1: In the manual flame control mode, use the down arrow button to reduce the flame to off, indicated by the word OFF displayed on the transmitter LCD screen.
Step 2: Wait approximately 2 seconds and press the up arrow button, the ignition sequence will start.
 4. To reset the DFC Board when the board goes into a lock out condition and the LED is blinking 3 times using the receiver switch.
Step 1: With the transmitter off, move the slider switch on the receiver to the OFF position.
Step 2: Wait approximately 2 seconds and move the receiver slider switch to the ON position. The ignition sequence will start again.

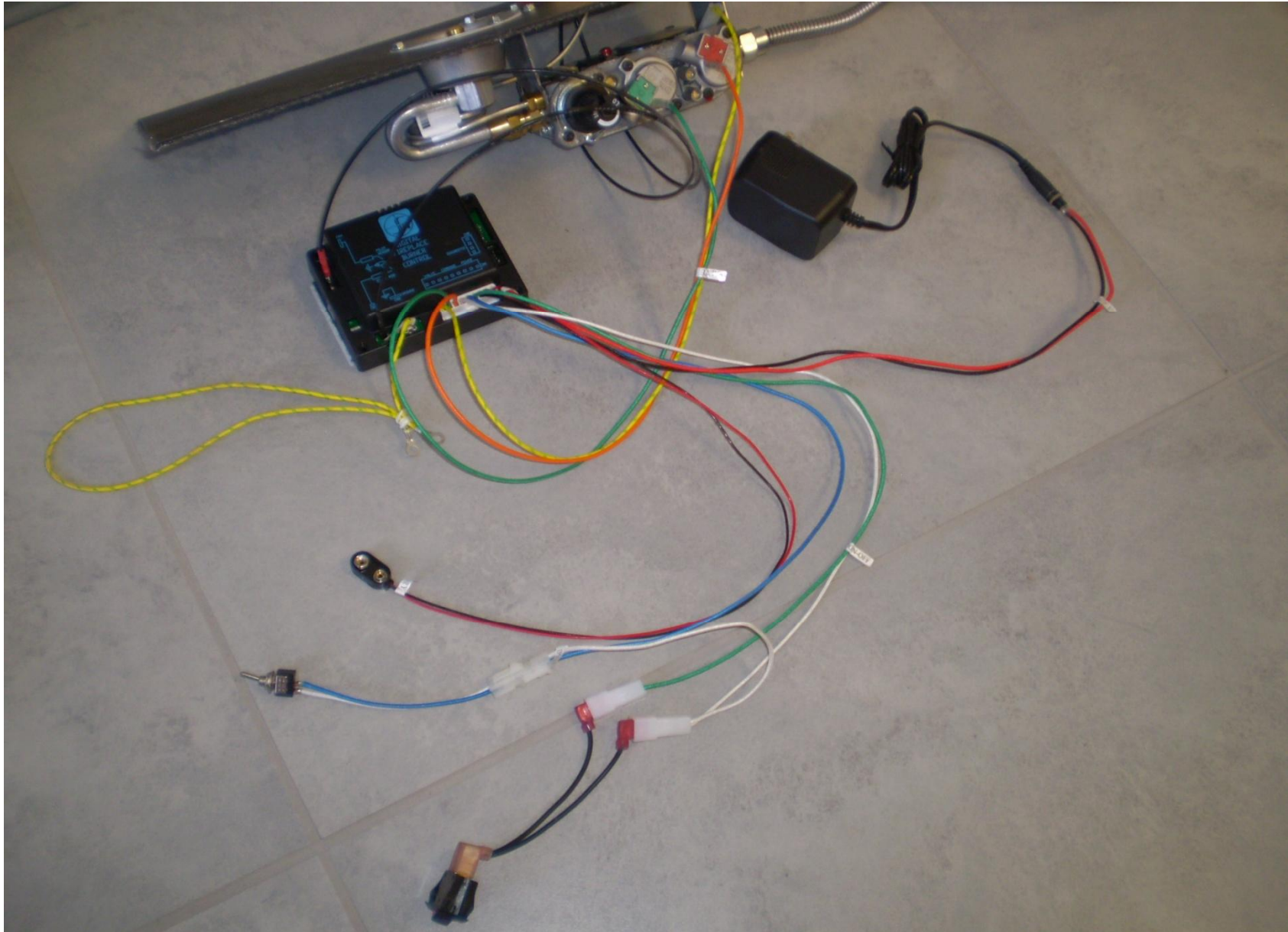
NOTE: Starting from OFF, press the ON button on the transmitter. Approximately 4 seconds after the ON/OFF button is pressed the ignition board will start the spark. The first try for ignition will last approximately 60 seconds. If there is no flame ignition (rectification) the board will stop sparking for approximately 35 seconds. After the wait time the board will start the second try for ignition by sparking for approximately 60 seconds. If there is still no positive ignition, the board will go into lock out.

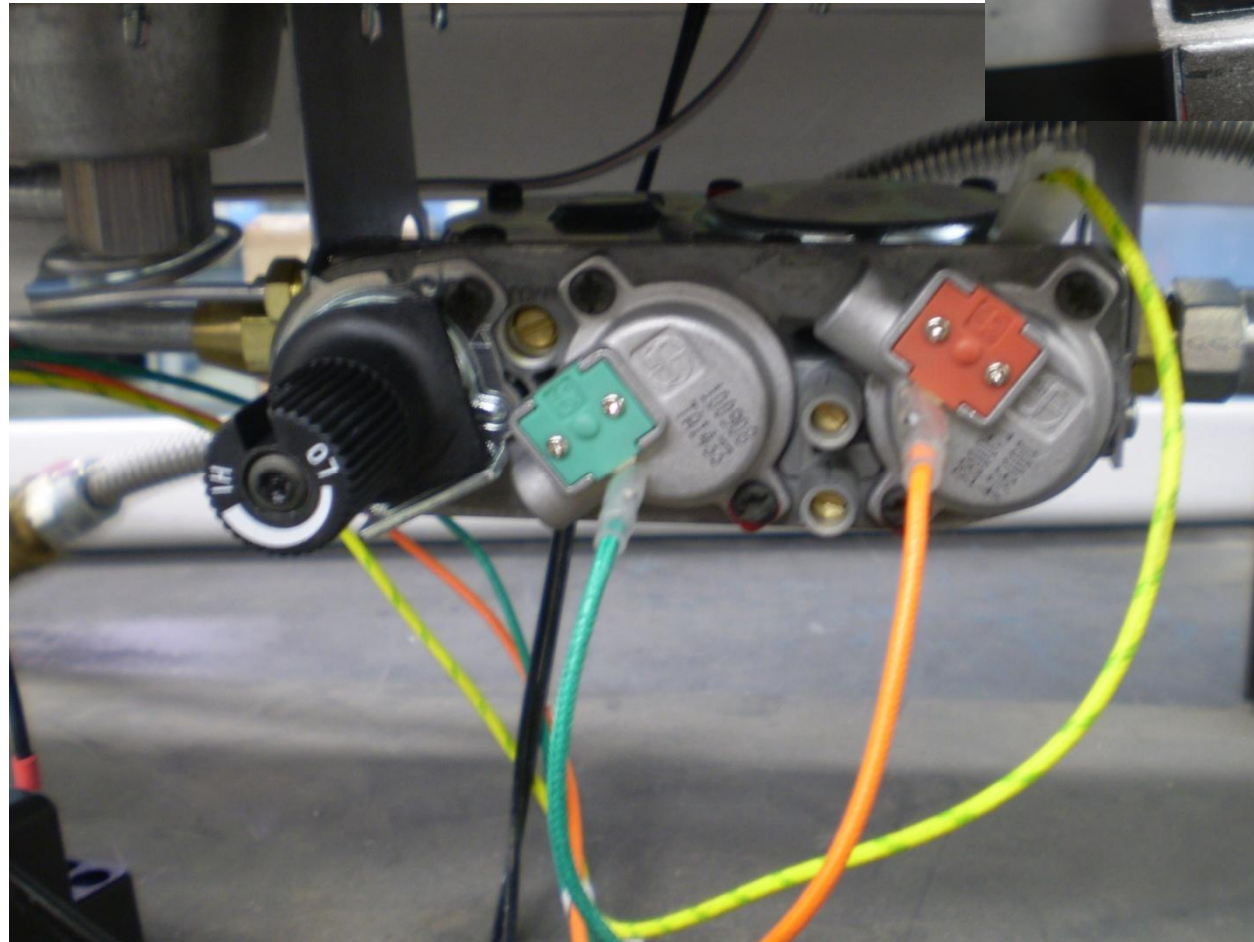
SYMPTOM	PROBLEM	TEST SOLUTION
Fireplace won't perform any functions.	Receiver switch is in the wrong position.	- Verify that the 3 position switch on the receiver is in the "REMOTE" position (middle).
	No power to the system.	- Check breaker to verify it's in the "ON" position.
	Transmitter isn't operational.	- Check battery power and battery orientation.
Night light or (optional) blower won't function	Control module switch is in the wrong position.	- Verify ON/OFF switch is in the "I" position which denotes on.
	COM switch is unplugged.	- Verify "COM" switch is plugged into the front of the control module.

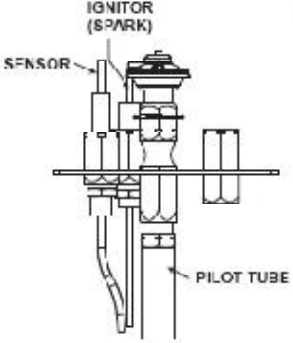
SYMPTOM	PROBLEM	TEST SOLUTION
Remote controls Crystalite / Night light but no spark or flame.	Remote is locked out.	<ul style="list-style-type: none"> - Reset by turning power source off then on. <p><u>NOTE:</u> If back up batteries are installed, they must also be removed to re-program.</p>
Pilot will not light. Makes noise with no spark at pilot burner.	Wiring.	<ul style="list-style-type: none"> - Verify the wire for the sensor and the wire for the ignitor are connected to the correct terminals (not reverse) on the module and pilot assembly.
	Loose connection.	<ul style="list-style-type: none"> - Verify no loose connections, electrical shorts in the wiring or ground out to any metal object.
	Igniter Spark gap is incorrect.	<ul style="list-style-type: none"> - Spark gap of the ignitor to the pilot should be .125" (1/8").

LHD45

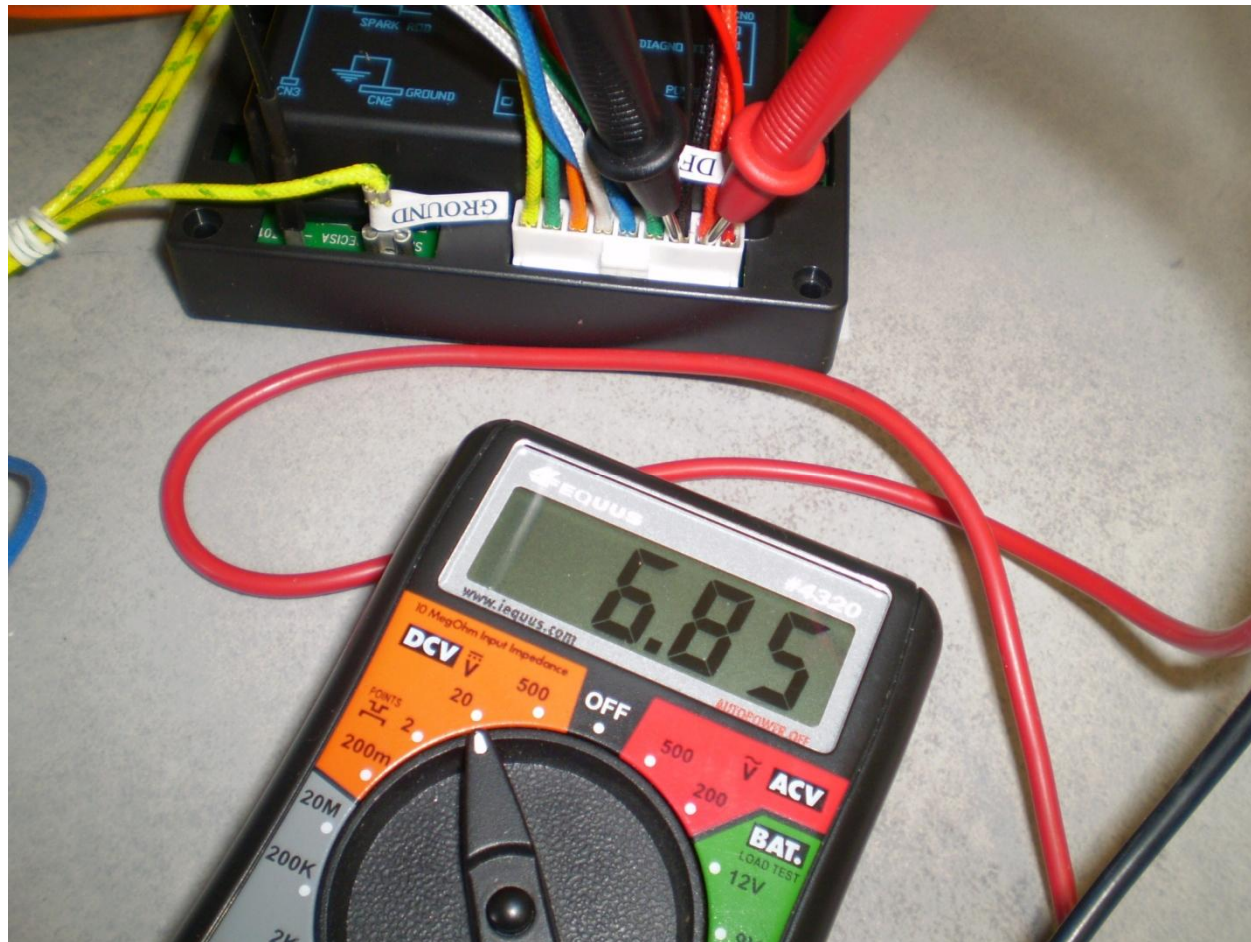


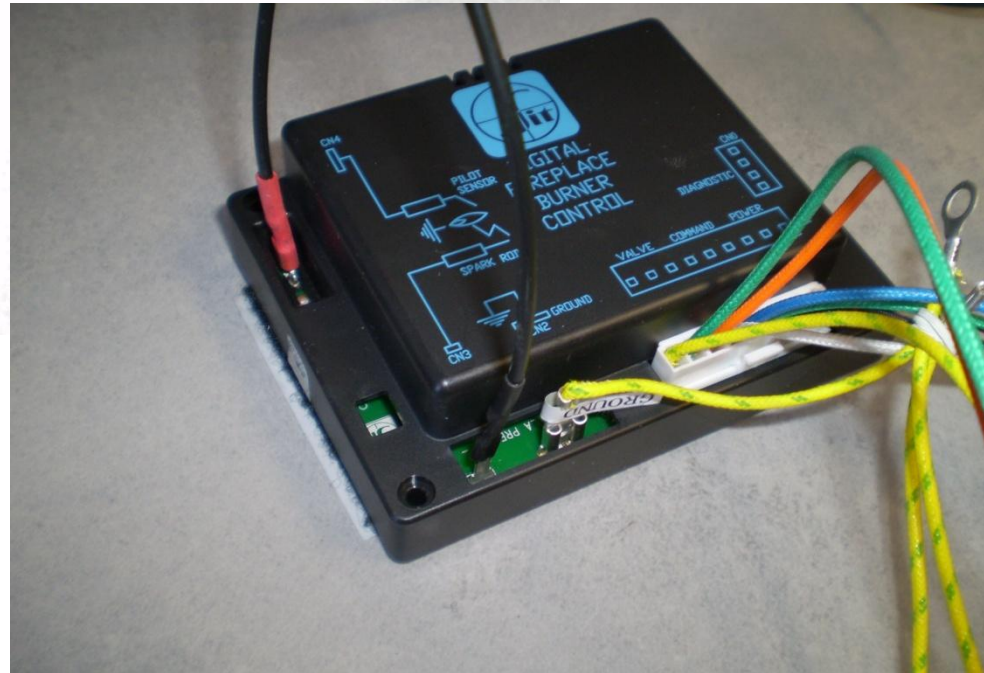
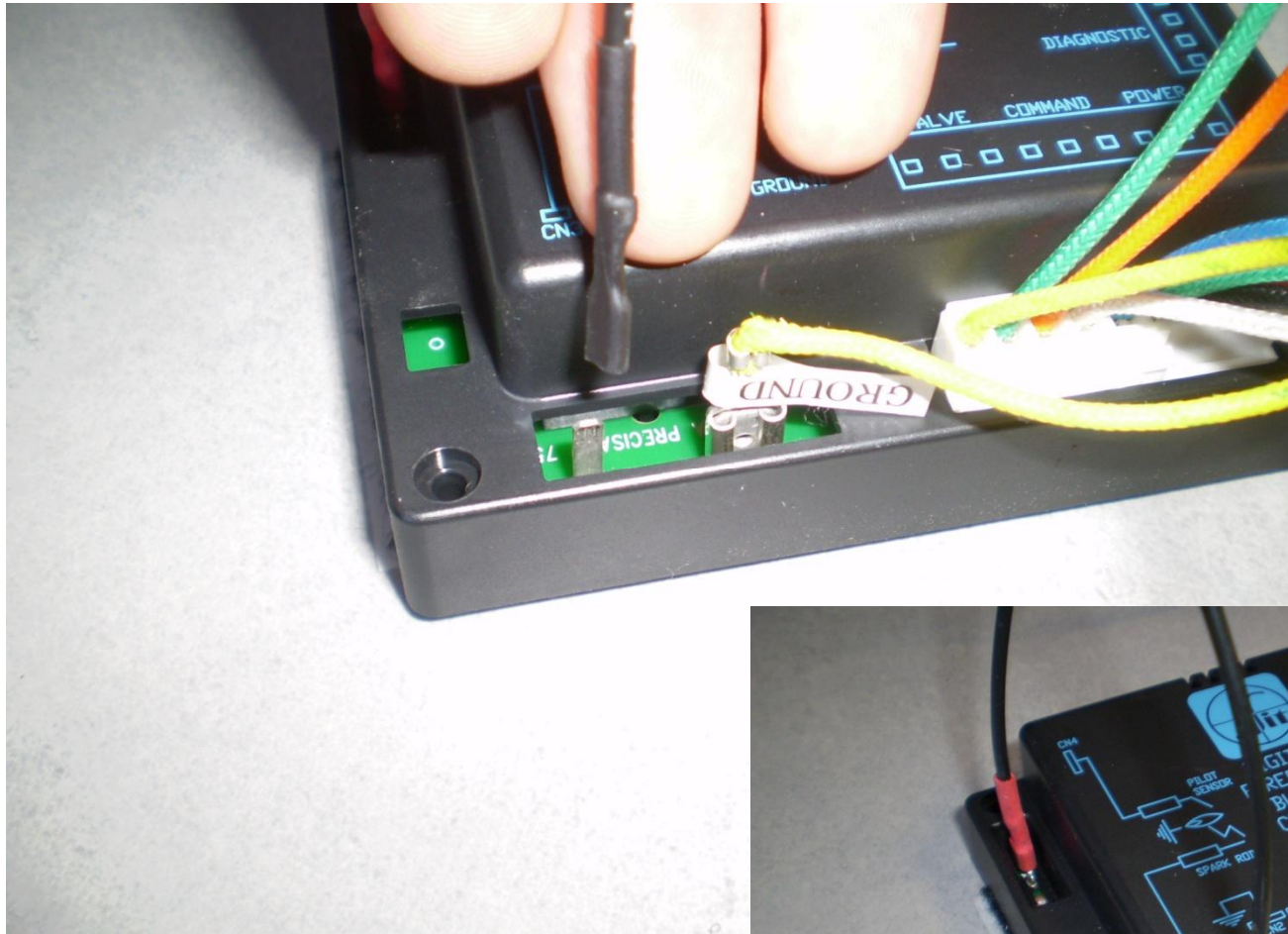




SYMPTOM	PROBLEM	TEST SOLUTION
Pilot will not light. Makes noise with no spark at pilot burner.	Wiring.	<ul style="list-style-type: none"> - Verify the wire for the sensor and the wire for the ignitor are connected to the correct terminals (not reversed) on the module. NOTE: Sensor has 3/16" connection and ignitor has 1/8" connection.
	Loose connection.	<ul style="list-style-type: none"> - Verify no loose connections, electrical shorts in the wiring or ground out to any metal object.
	Module.	<ul style="list-style-type: none"> - Turn the ON/OFF switch to the "OFF" position. Remove the igniter wire from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" away from the ignitor (spark) terminal on the module. If no spark the Ignitor terminal module must be replaced. If there is a spark the ignitor terminal is fine. Inspect pilot assembly for a shorted wire or cracked insulator around the electrode.
	Igniter Spark gap is incorrect.	<ul style="list-style-type: none"> - Spark gap of the ignitor to the pilot should be 1/8".
	Transformer.	<ul style="list-style-type: none"> - Verify the transformer is installed and plugged into the module. Check voltage of the transformer under load at the spade connections on the module with the ON/OFF switch in the "ON" position. Acceptable readings of a good transformer are between 6.2 and 7.0 volts A.C.
	Battery backup (if power is off)	<ul style="list-style-type: none"> - Check batteries.
	A shorted or loose Connection.	<ul style="list-style-type: none"> - Remove and reinstall the wiring harness that plugs into the module. Remove and verify continuity of each wire in wiring harness.
	Improper switch wiring.	<ul style="list-style-type: none"> - Troubleshoot the system with the simplest ON/OFF switch.
	Module is not grounded.	<ul style="list-style-type: none"> - Verify the valve and pilot assemblies are properly grounded to the metal chassis of the appliance or load set.

TRANSFORMER OUTPUT UNDER LOAD 6.2- 7.0 DC





SYMPTOM	PROBLEM	TEST SOLUTION
Continues to spark and pilot lights, but main burner will not light.	Short or loose connection in sensor rod.	- Verify all connections. Verify the connections from the pilot assembly are tight; also verify these connections are not grounding out to any metal.
	Poor flame rectification or contaminated sensor rod.	- Verify the flame is engulfing the sensor rod. This will increase the flame rectification. Verify correct pilot orifice is installed and inlet gas specifications to manual. (Remember, the flame carries the rectification current, not the gas. If the flame lifts from pilot hood, the circuit is broken. A wrong orifice or too high of an inlet pressure can cause the pilot flame to lift.) The sensor rod may need cleaning.
	Poor grounding between pilot assembly and gas valve.	- Verify that the wire harness is firmly connected to module. Verify that the ceramic insulator around the sensor rod is not cracked, damaged, or loose. Verify the connection from the sensor rod to the sensor wire.
	Damaged pilot or dirty sensor rod.	- Clean sensor rod with an emery cloth to remove any contamination that may have accumulated on the sensor rod. Verify continuity with multimeter with ohms set at the lowest range.
Pilot lights Stops sparking / pilot remains lit but burner will not turn on.	Wiring / Connection.	- Inspect all wires, ensure good tight connections. Verify that all wiring is installed exactly as specified.
	Wiring harness.	- Inspect the wiring harness, and verify the harness is tightly connected to the module. Verify that all wires are connected in the right order. See "WIRING DIAGRAM" section.

HD81

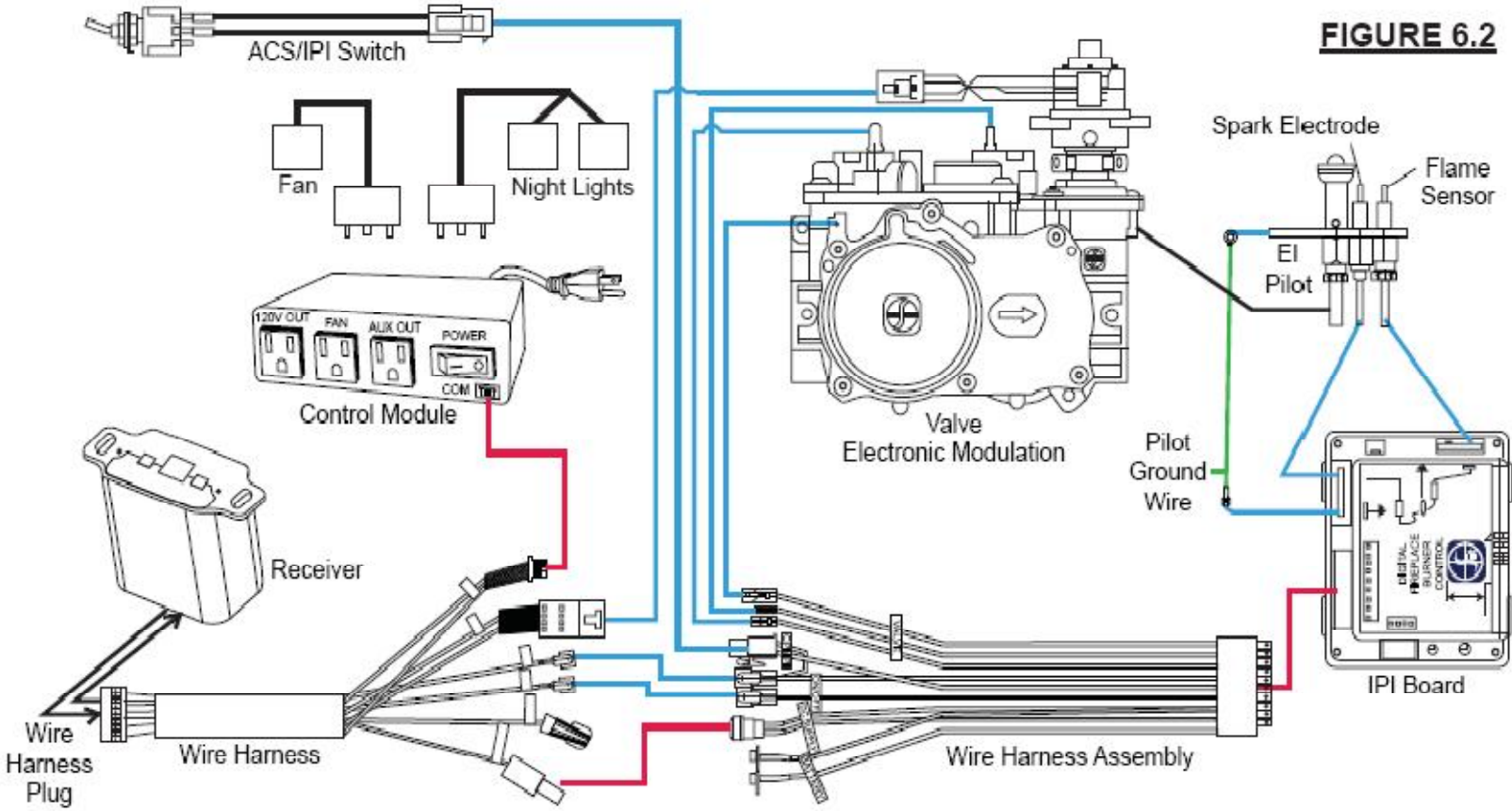
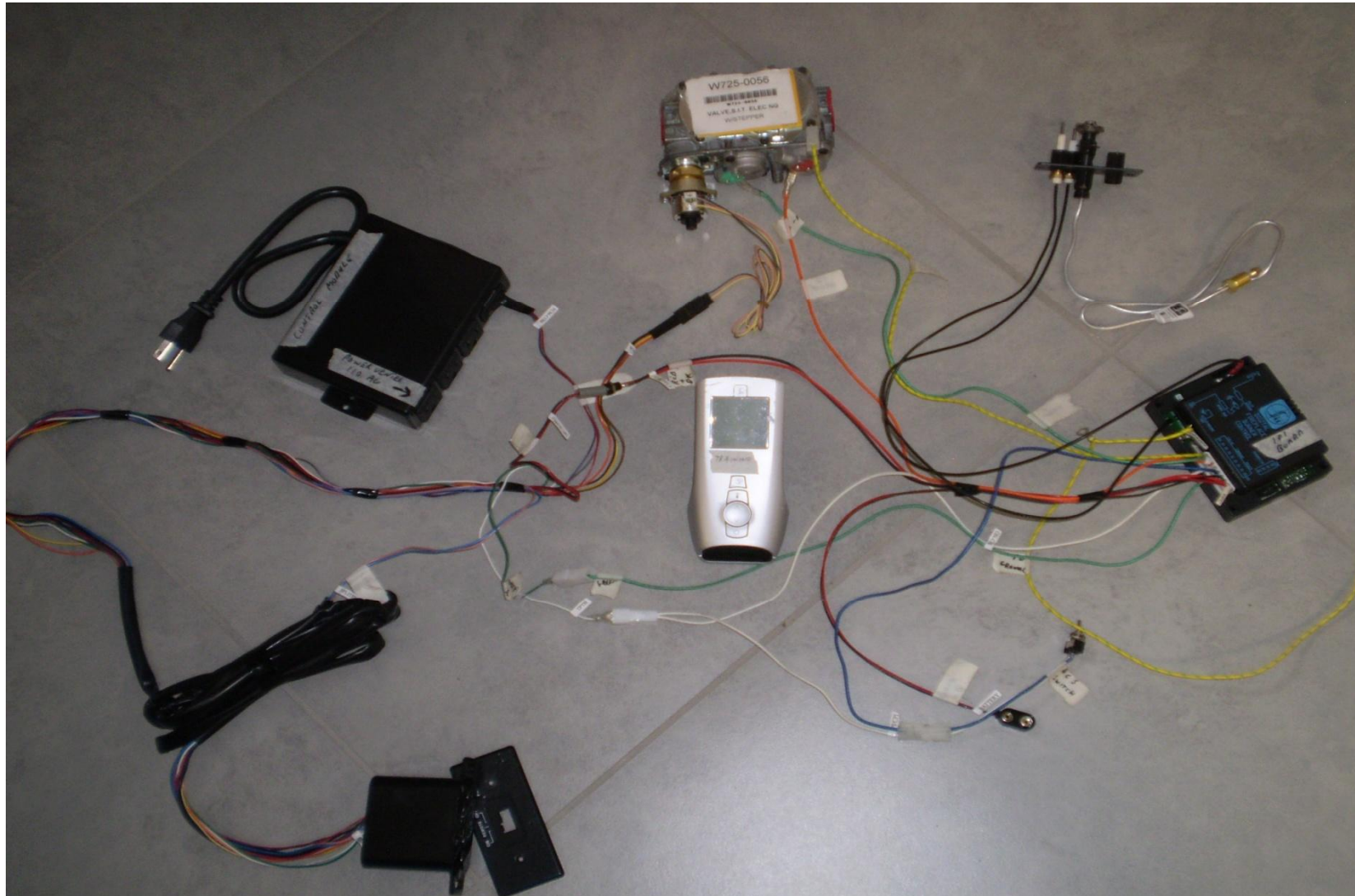
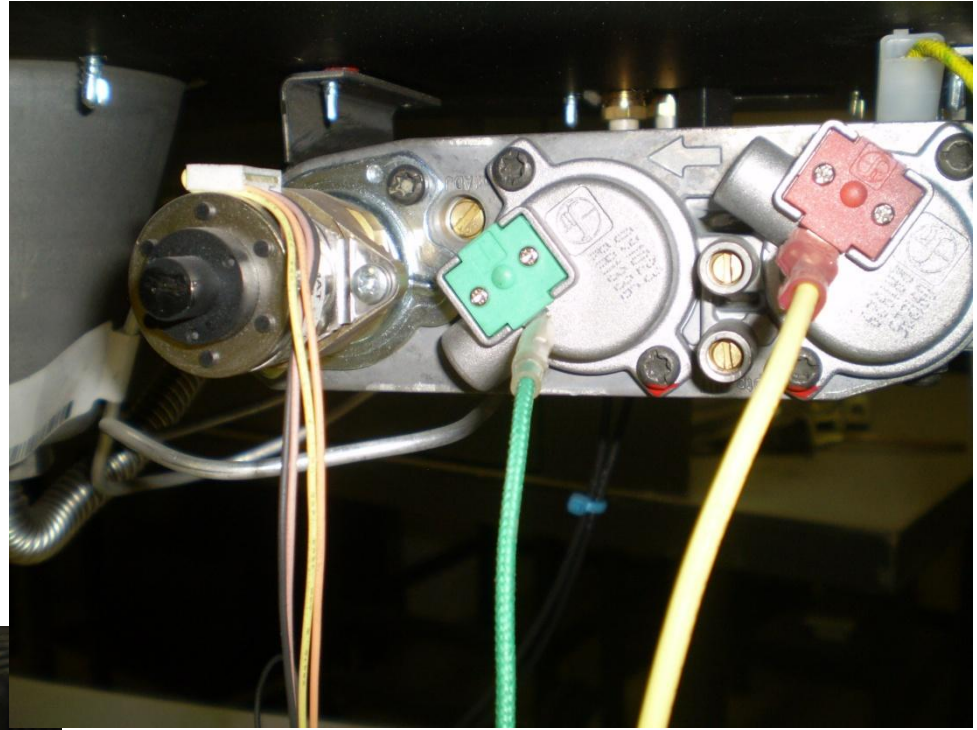


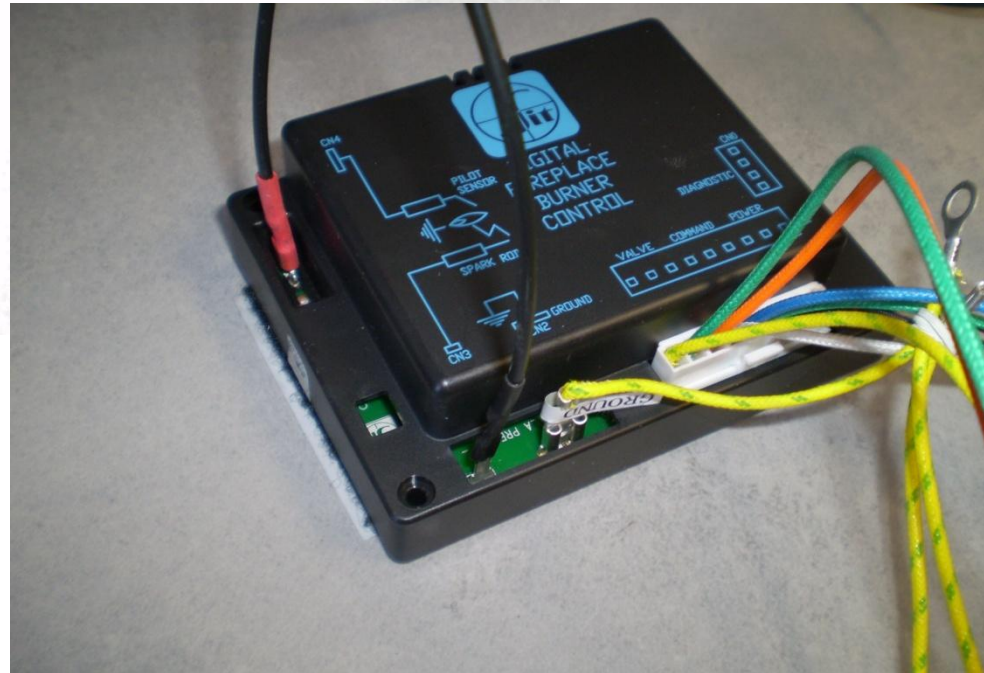
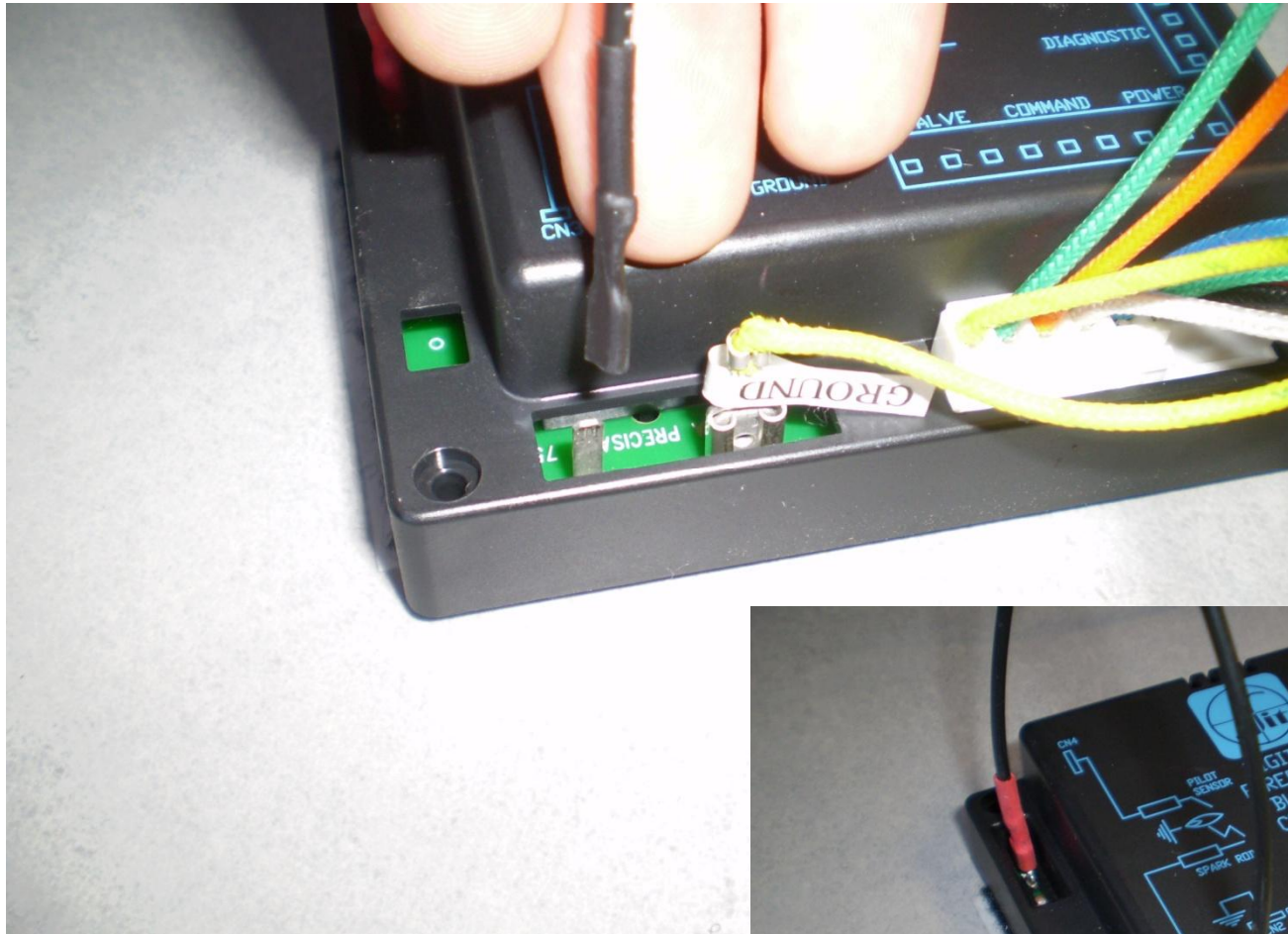
FIGURE 6.2

HD81 WIRING





SYMPTOM	PROBLEM	TEST SOLUTION
Pilot sparks but will not light.	Gas supply.	<ul style="list-style-type: none"> - Verify that the incoming gas line ball valve is "Open". - Verify that the inlet pressure reading is within acceptable limits, inlet pressures must not exceed 14" W.C.
	Module is not grounded.	<ul style="list-style-type: none"> - Verify the valve and pilot assemblies are properly grounded to the metal chassis of the fireplace.
	Out of propane gas.	<ul style="list-style-type: none"> - Fill the tank.
Continues to spark and pilot lights, but main burner will not light.	Short or loose connection in sensor rod.	<ul style="list-style-type: none"> - Verify all connections. Verify the connections from the pilot assembly are tight; also verify these connections are not grounding out to any metal.
	Poor flame rectification or contaminated sensor rod.	<ul style="list-style-type: none"> - Verify the flame is engulfing the sensor rod. This will increase the flame rectification. Verify correct pilot orifice is installed and inlet gas specifications to manual. <i>(Remember, the flame carries the rectification current, not the gas. If the flame lifts from pilot hood, the circuit is broken. A wrong orifice or too high of an inlet pressure can cause the pilot flame to lift.)</i> The sensor rod may need cleaning.
	Poor grounding between pilot assembly and gas valve.	<ul style="list-style-type: none"> - Verify that the wire harness is firmly connected to module.
	Damaged pilot or dirty sensor rod.	<ul style="list-style-type: none"> - Verify that the ceramic insulator around the sensor rod is not cracked, damaged, or loose. Verify the connection from the sensor rod to the sensor wire. Clean sensor rod with an emery cloth to remove any contamination that may have accumulated on the sensor rod. Verify continuity with multimeter with ohms set at the lowest range.



SYMPTOM	PROBLEM	TEST SOLUTION
---------	---------	---------------

Pilot will not light.
Makes no noise
with no spark at
pilot burner.
Crystalites™ and
blower operates.

A shorted or loose
connection.

- Remove and reinstall the wiring harness that plugs into the module.
- Remove and verify continuity of each wire in the wiring harness.

Module is not grounded.

- Verify the valve and pilot assemblies are properly grounded to the metal chassis of the fireplace.

Ignition box has been
locked out.

- Choose one of the 4 methods below to reset the system.
1. To reset ignition box when locked out. Turn off power supply and remove batteries (if used) from the receiver.
 2. To reset the DFC Board when the board goes into a lock out condition and the LED is blinking 3 times using the transmitter ON/OFF button:
 - Step 1:** Turn the system off by pressing the ON/OFF button to turn the system off.
 - Step 2:** After approximately 2 seconds press the ON/OFF button on the transmitter again. THE DFC Board will reset and the ignition sequence will start again.
 3. To reset the DFC Board when the board goes into a lock out condition and the LED is blinking 3 times by cycling flame:
 - Step 1:** In the manual flame control mode, use the down arrow button to reduce the flame to off, indicated by the word OFF displayed on the transmitter LCD screen.
 - Step 2:** Wait approximately 2 seconds and press the up arrow button, the ignition sequence will start.
 4. To reset the DFC Board when the board goes into a lock out condition and the LED is blinking 3 times using the receiver switch.
 - Step 1:** With the transmitter off, move the slider switch on the receiver to the OFF position.
 - Step 2:** Wait approximately 2 seconds and move the receiver slider switch to the ON position. The ignition sequence will start again.

NOTE: Starting from OFF, press the ON button on the transmitter. Approximately 4 seconds after the ON/OFF button is pressed the ignition board will start the spark. The first try for ignition will last approximately 60 seconds. If there is no flame ignition (rectification) the board will stop sparking for approximately 35 seconds. After the wait time the board will start the second try for ignition by sparking for approximately 60 seconds. If there is still no positive ignition, the board will go into lock out.

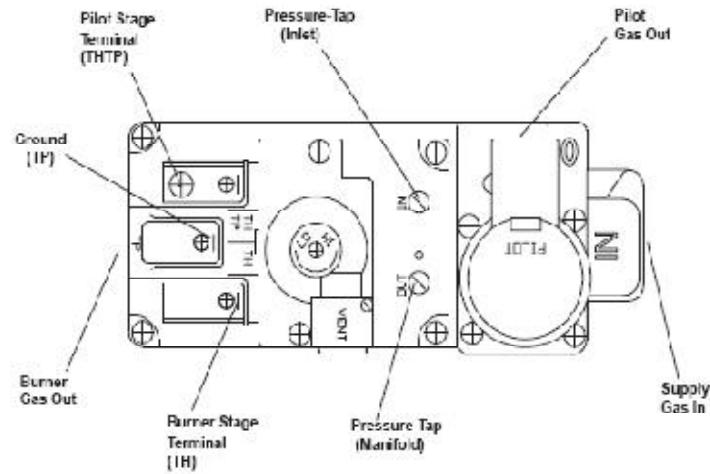
SYMPTOM	PROBLEM	TEST SOLUTION
Remote controls Crystalite / Night light but no spark or flame.	Remote is locked out.	- Reset by turning power source off then on.
Pilot will not light. Makes noise with no spark at pilot burner.	Wiring.	- Verify the wire for the sensor and the wire for the ignitor are connected to the correct terminals (not reverse) on the module and pilot assembly.
	Loose connection.	- Verify no loose connections, electrical shorts in the wiring or ground out to any metal object.
	Igniter Spark gap is incorrect.	- Spark gap of the ignitor to the pilot should be .125" (1/8").

SYMPTOM	PROBLEM	TEST SOLUTION
Fireplace won't perform any functions.	Receiver switch is in the wrong position.	- Verify that the 3 position switch on the receiver is in the "REMOTE" position (middle).
	No power to the system.	- Check breaker to verify it's in the "ON" position.
	Transmitter isn't operational.	- Check battery power and battery orientation.
Night light or option blower won't function	Control module switch is in the wrong position.	- Verify ON/OFF switch is in the "I" position which denotes on.
	COM switch is unplugged.	- Verify "COM" switch is plugged into the front of the control module.

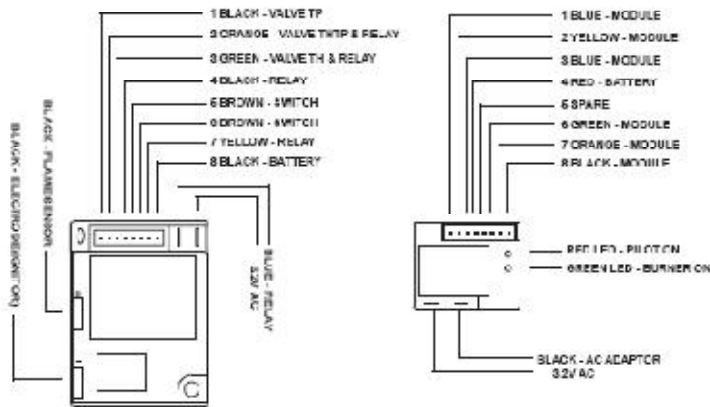
GD36NTRE

the door.

3. For ease of accessibility, an optional remote wall switch or millivolt thermostat may be installed in a convenient location.

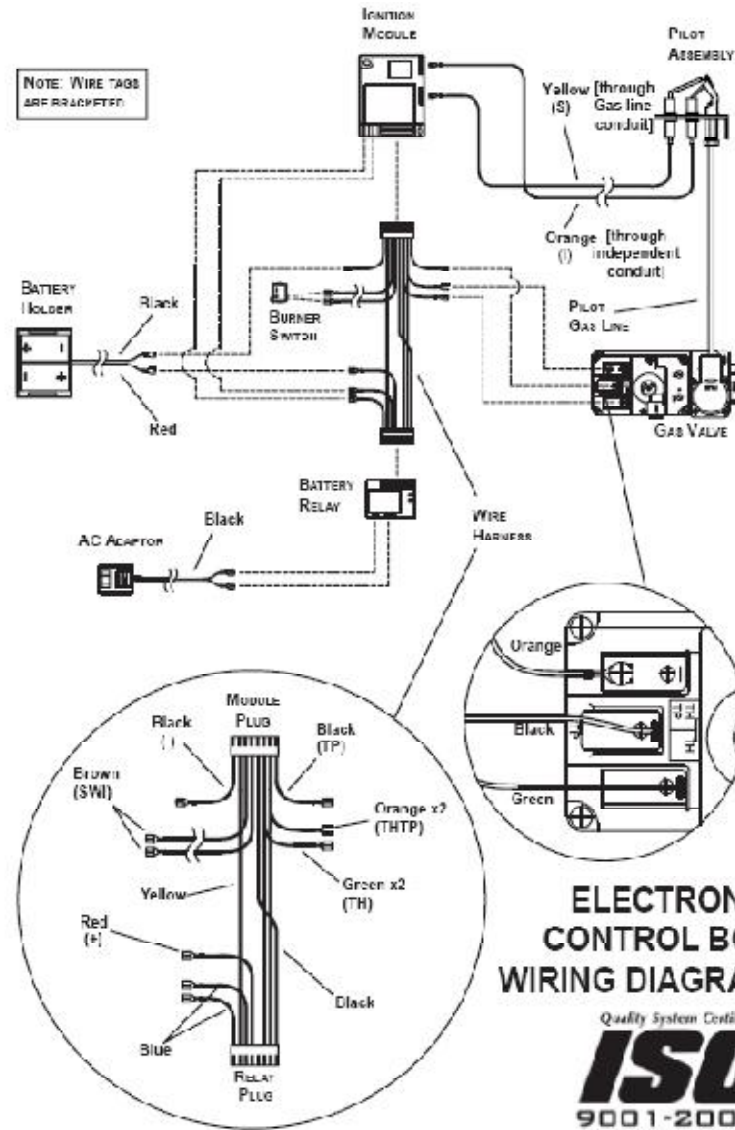


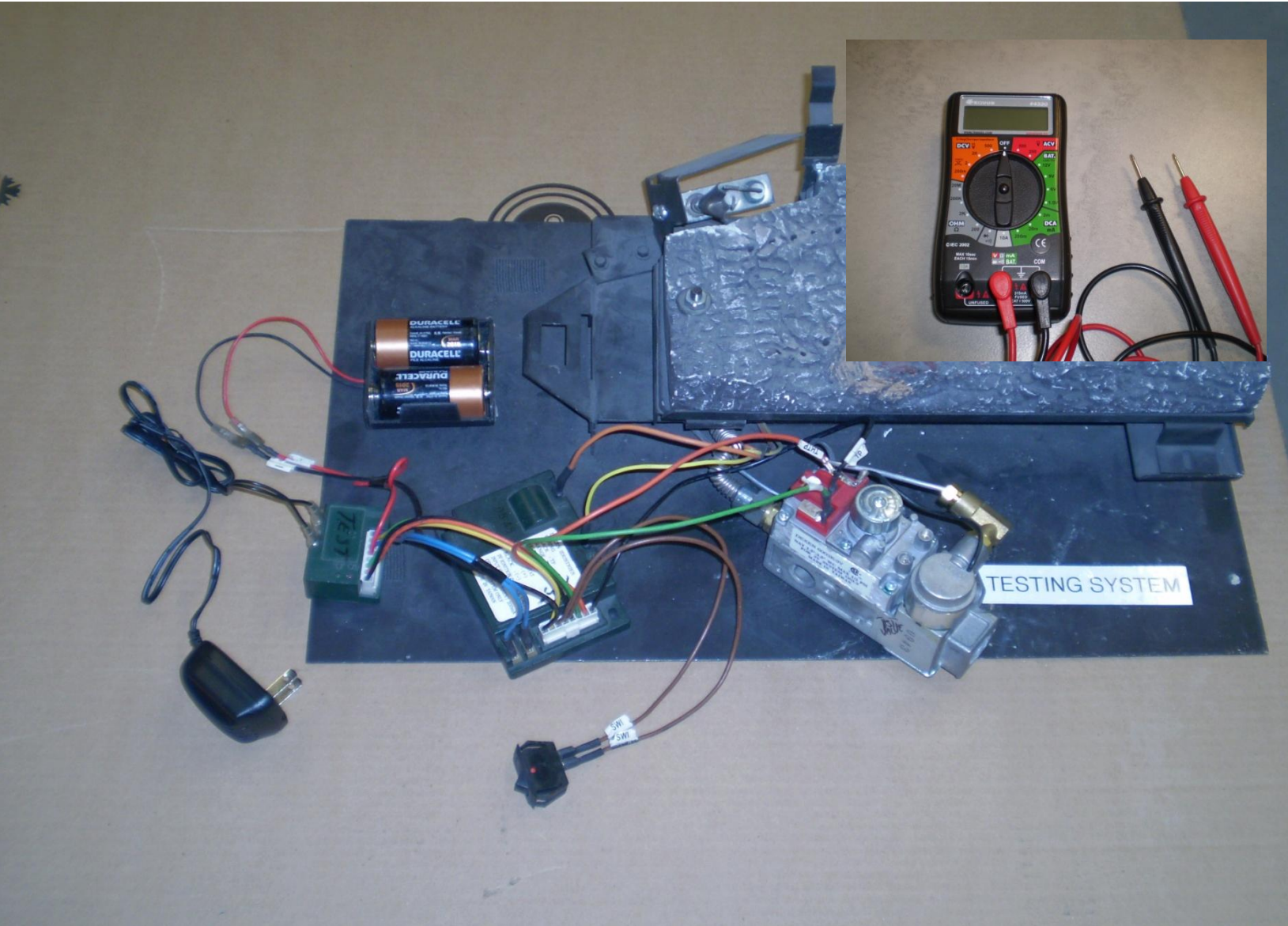
ELECTRIC GAS VALVE

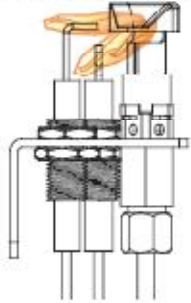


IGNITION MODULE

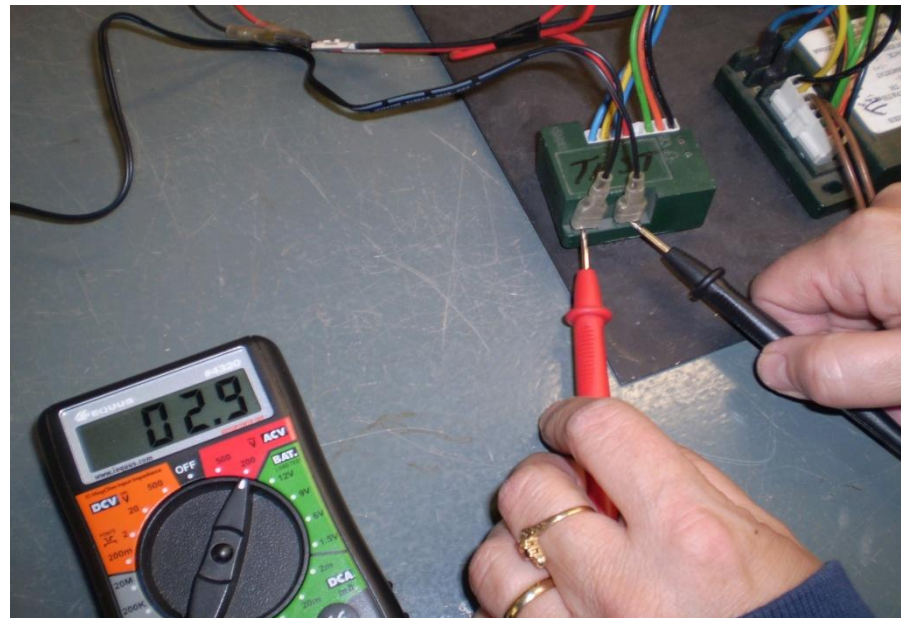
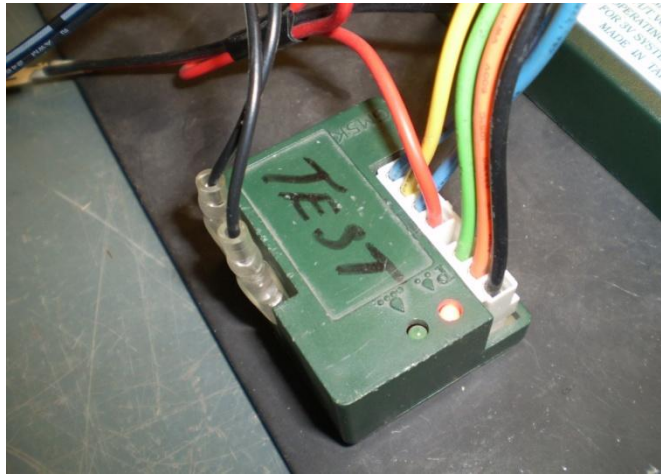
BATTERY RELAY

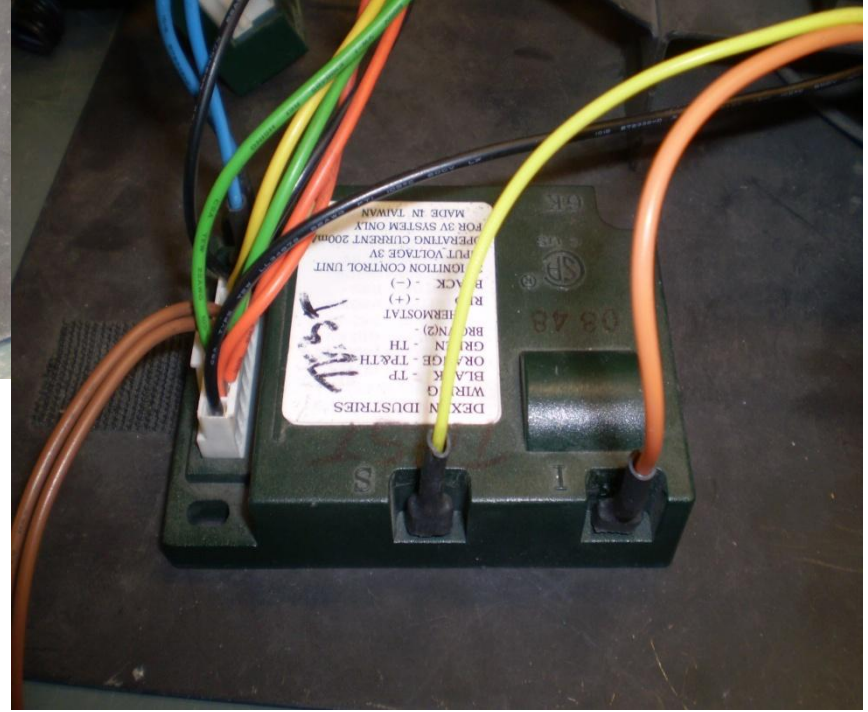
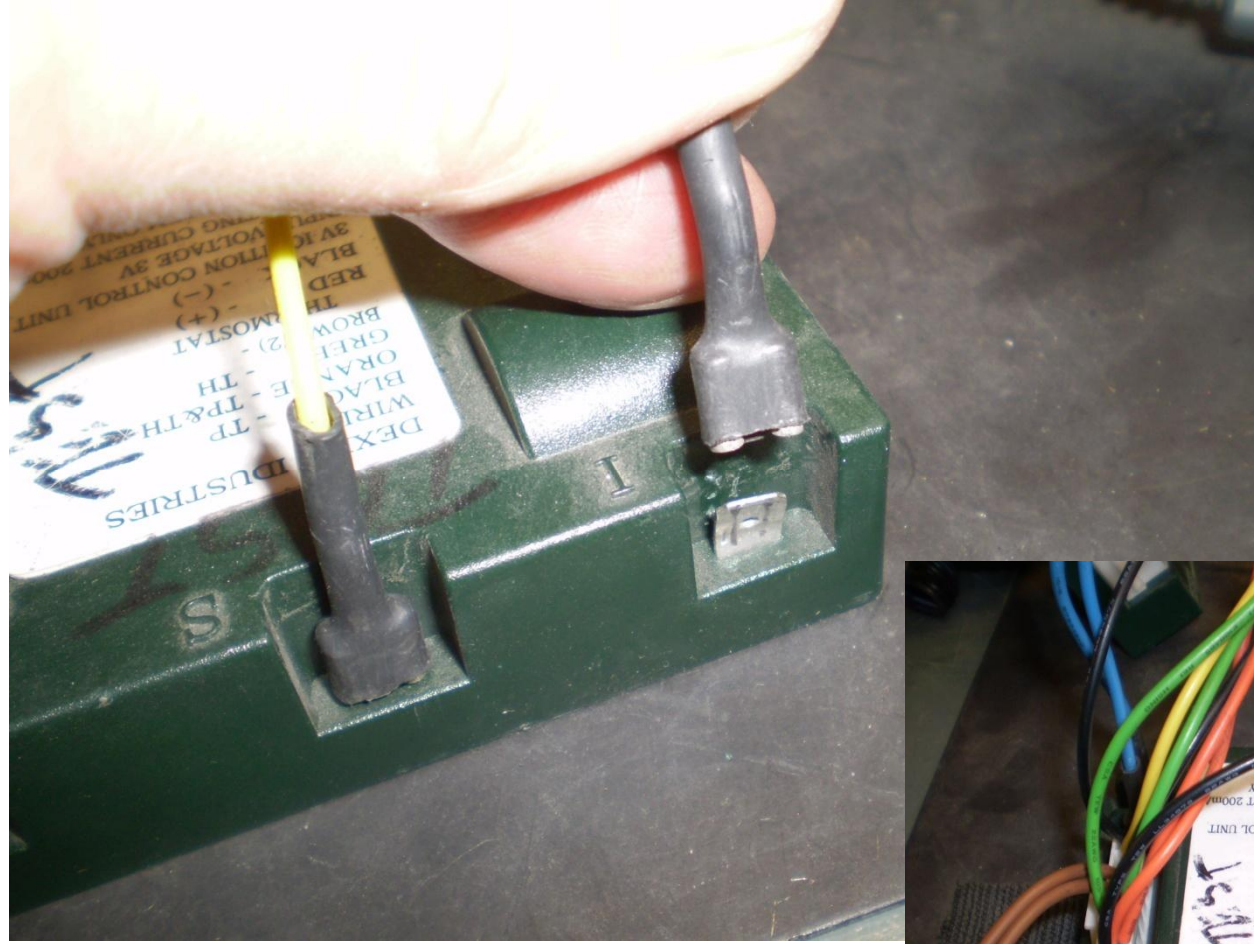




SYMPTOM	PROBLEM	TEST SOLUTION
Pilot will not light.	Wiring.	- Verify the "S" wire for the sensor and the "I" wire for the ignitor are connected to the correct terminals (not reverse) on the module and pilot assembly
	Loose connection.	- Verify no loose connections, electrical shorts in the wiring or ground out to any metal object.
Makes noise with no spark at pilot burner.	Module	- Turn the ON/OFF switch to the "OFF" position Remove the igniter wire "I" from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" away from the "I" terminal on the module. If no spark the "I" terminal module must be replaced. If there is a spark the "I" terminal is fine. Inspect pilot assembly for a shorted wire or cracked insulator around the electrode.
	Igniter Spark gap is incorrect.	- Spark gap of the ignitor to the pilot should be .17" tor 1/8"
Pilot will not light.	Transtormer.	- Verty the transtormer is installed and plugged into the module. Check voltage of the transformer under load at the spade connections on the module with the ON/OFF switch in the "ON" position. Acceptable readings of a good transformer are between 3.2 and 2.8 volts A.C.
	A shorted or loose Connection.	- Remove and reinstall the wiring harness that plugs into the module. Remove and verify continuity of each wire in wiring harness.
Makos no noise with no spark at pilot burner.	Improper switch wiring.	- Troubleshoot the system with the simplest ON/OFF switch.
	Module is not grounded.	- Verify the value and pilot assemblies are properly grounded to the metal chassis of the fireplace or log set.
	Faulty module.	- Turn the ON/OFF switch to the "OFF" position. Remove the igniter wire "I" from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" away from the "I" terminal on the module. If no spark the "I" terminal module must be replaced. If there is a spark the "I" terminal is fi ne. Inspect pilot assembly for a shorted wire or cracked insulator around the electrode.

TEST THE AC POWER FROM THE TRANSFORMER 2.8 – 3.4 AC

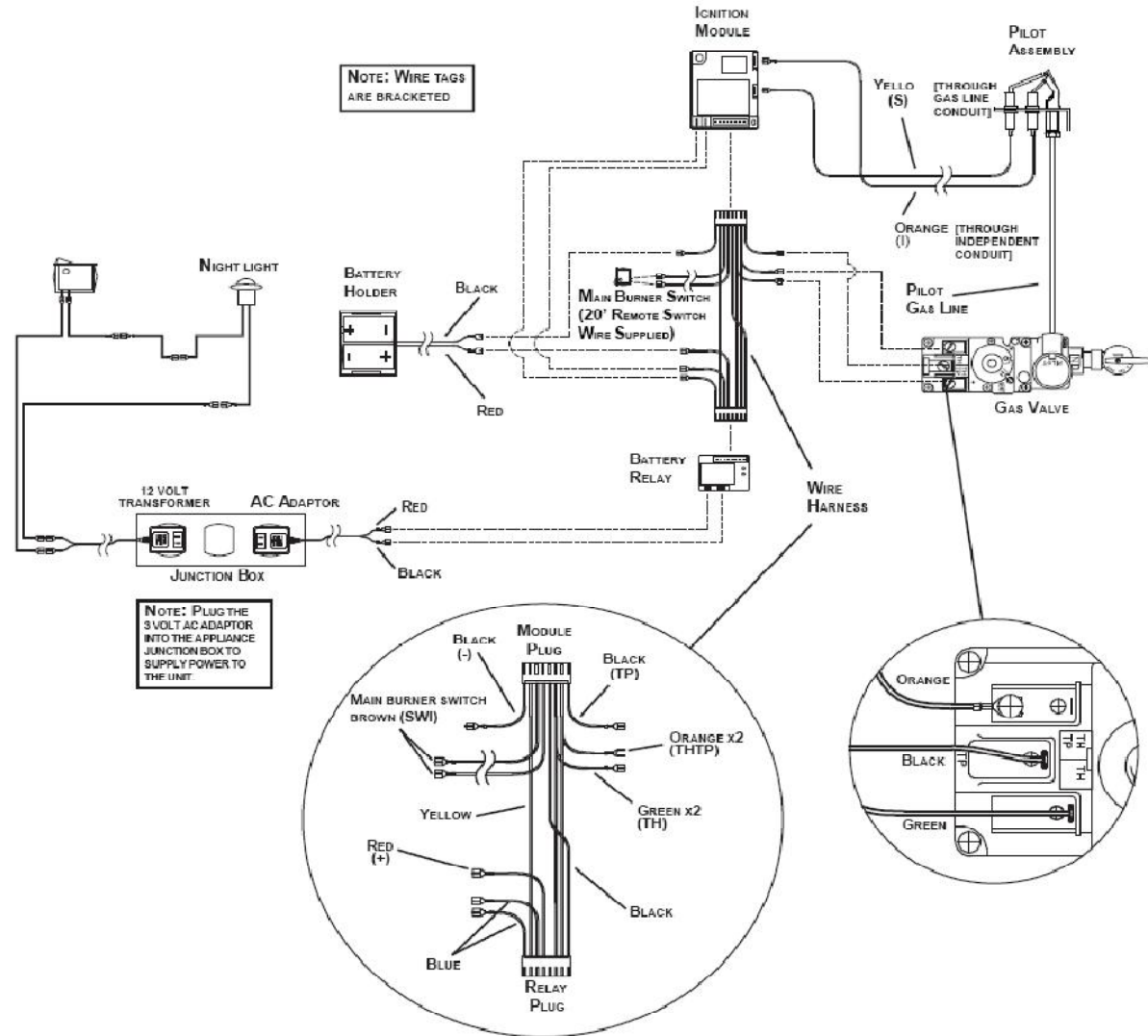


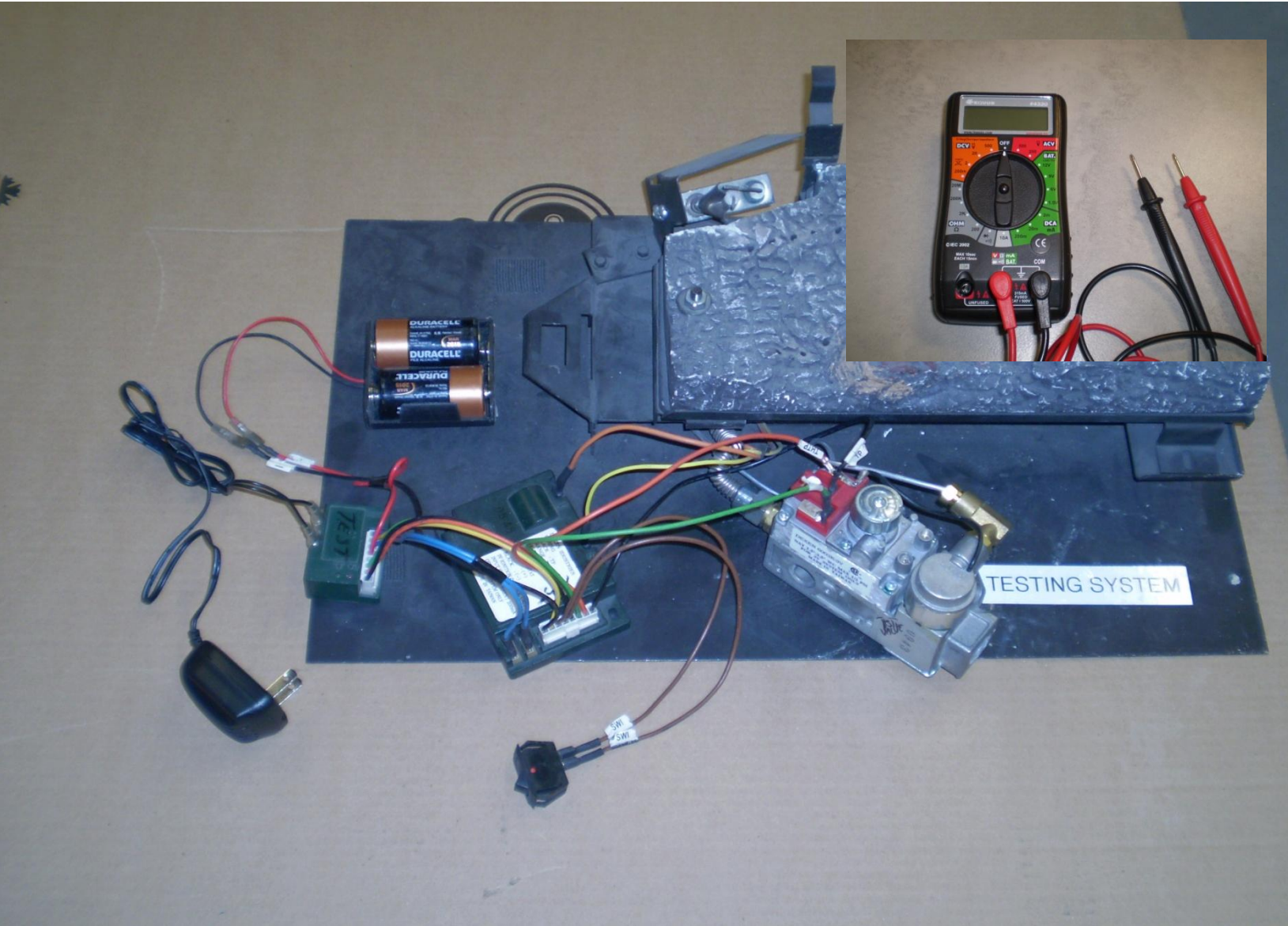


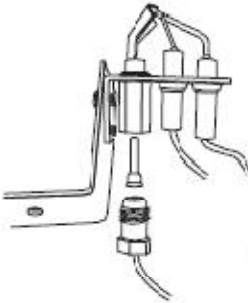
SYMPTOM	PROBLEM	TEST SOLUTION
Pilot sparks but will not light.	Gas supply.	<ul style="list-style-type: none"> - Verify that the incoming gas line ball valve is "Open". - Verify that the inlet pressure reading is within acceptable limits, inlet pressures must not exceed 14" W.C.
	Module is not grounded.	<ul style="list-style-type: none"> - Verify the valve and pilot assemblies are properly grounded to the metal chassis of the fireplace or log set.
	Out of propane gas.	<ul style="list-style-type: none"> - Fill the tank.
Continues to sparks and pilot lights, but main burner will not light.	Short or loose connection in sensor rod.	<ul style="list-style-type: none"> - Verify all connections. Verify the connections from the pilot assembly are tight; also verify these connections are not grounding out to any metal.
	Poor flame rectification or contaminated sensor rod.	<ul style="list-style-type: none"> - Verify the flame is engulfing the sensor rod. This will increase the flame rectification. Verify correct pilot orifice is installed and inlet gas specifications to manual. (Remember, the flame carries the rectification current, not the gas. If the flame lifts from pilot hood, the circuit is broken. A wrong orifice or too high of an inlet pressure can cause the pilot flame to lift.) The sensor rod may need cleaning.
	Poor grounding between pilot assembly and gas valve.	<ul style="list-style-type: none"> - Verify that the wire harness is firmly connected to module. Verify that the ceramic insulator around the sensor rod is not cracked, damaged, or loose. Verify the connection from the sensor rod to the sensor wire.
	Damaged pilot or dirty sensor rod	<ul style="list-style-type: none"> - Clean sensor rod with an emery cloth to remove any contamination that may have accumulated on the sensor rod. Verify continuity with multimeter with ohms set at the lowest range.

SYMPTOM	PROBLEM	TEST SOLUTION
Pilot lights Stops sparking / pilot remains lit but burner will not turn on.	Wiring / Connection.	<ul style="list-style-type: none"> - Inspect all wires, ensure good tight connections. Verify that all wiring is installed exactly as specified.
	Wiring harness.	<ul style="list-style-type: none"> - Inspect the wiring harness, and verify the harness is tightly connected to the module. Verify that you have 7 wires and they are connected in the right order.
	Module or Valve.	<ul style="list-style-type: none"> - Conduct the following test to verify if the problem is the module or valve. To measure voltages, turn multimeter to "DC" place the red lead from multimeter on the screw on the terminal block for the wire you are checking, touch black lead to ground (valve body). Importantly, a "Zero" volts reading does not automatically indicate a bad module, there may be too high resistance in the valve solenoid. Check the Green wire disconnected from valve that the voltage output from the module should be between 2 and 3 volts.

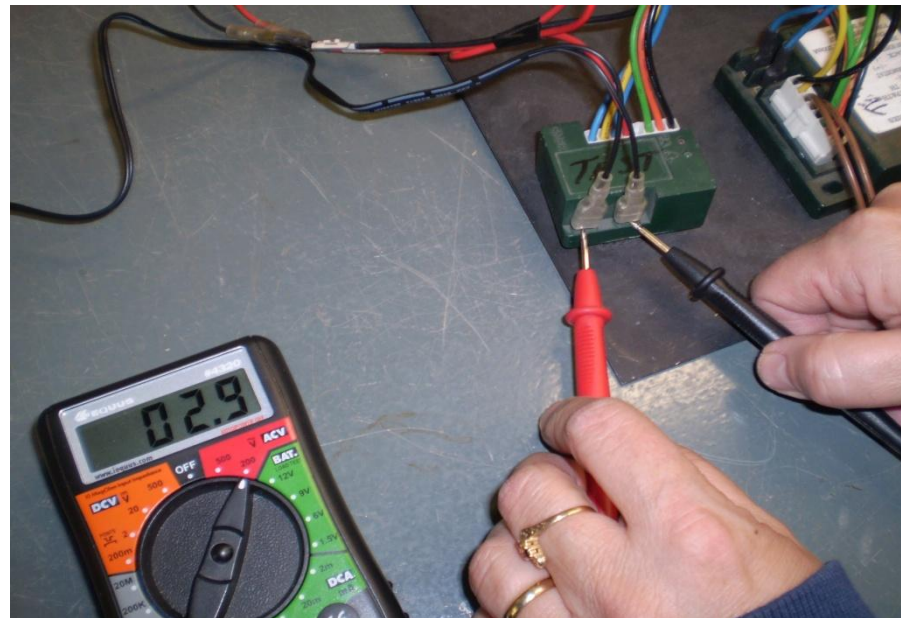
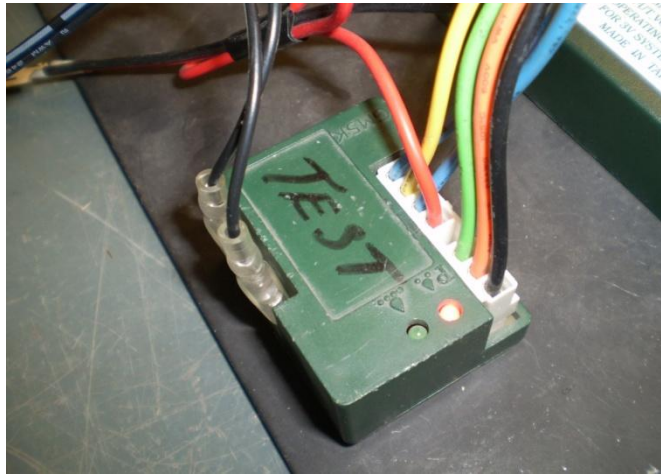
HDX40

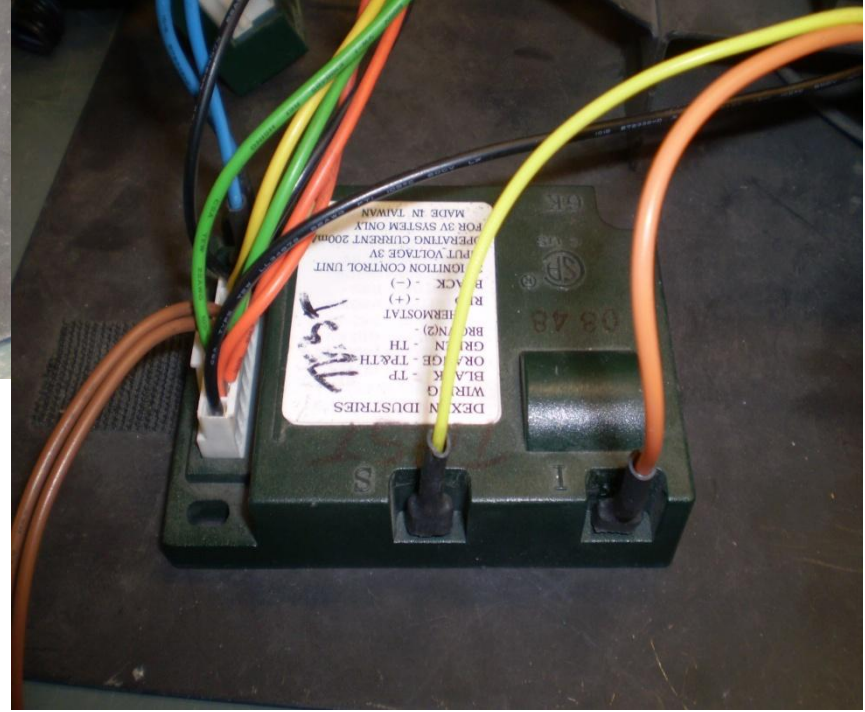
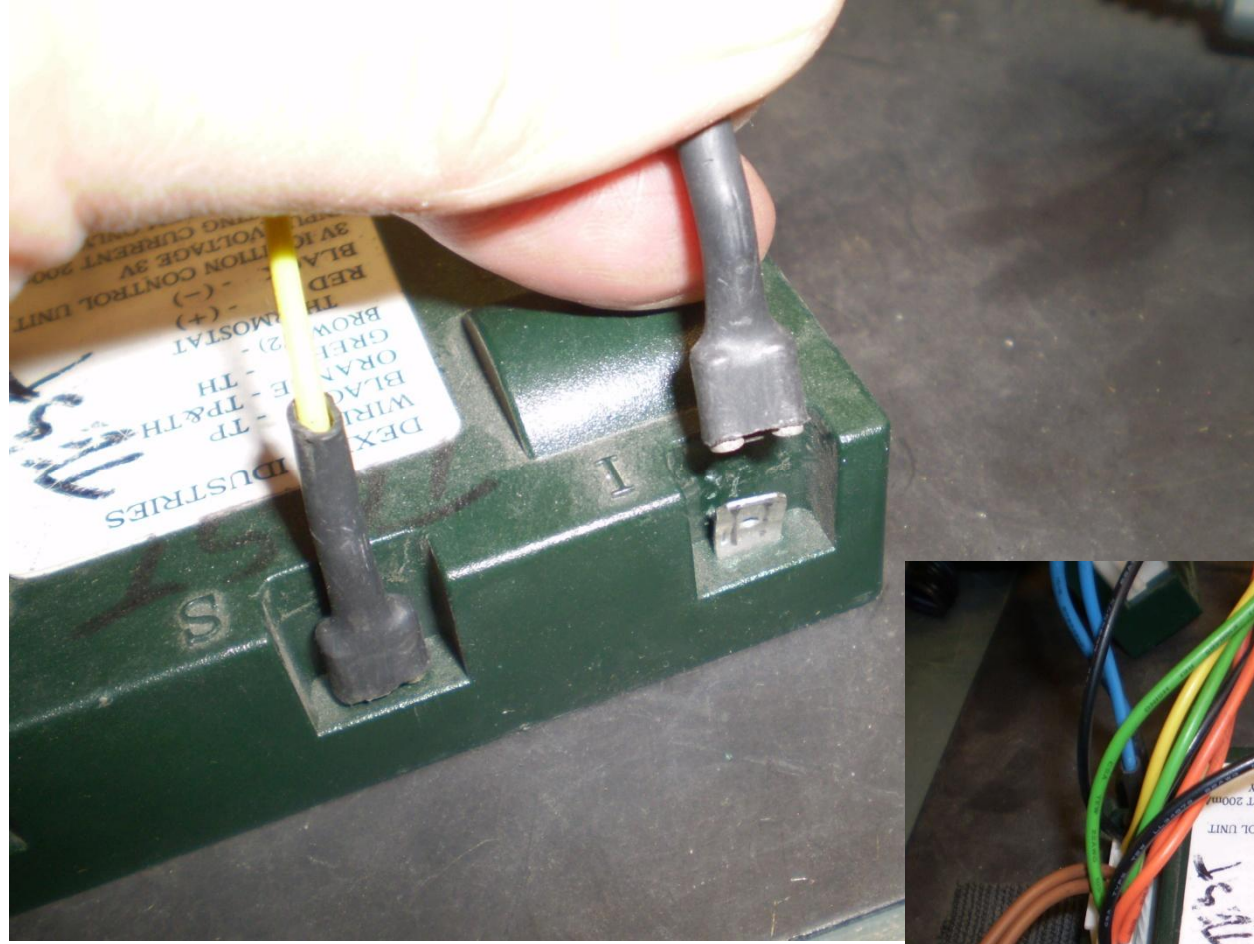




SYMPTOM	PROBLEM	TEST SOLUTION
Pilot will not light.	Wiring.	- Verify the "S" wire for the sensor and the "I" wire for the ignitor are connected to the terminals on the module and pilot assembly.
Makes noise with no spark at pilot burner.	Loose connection.	- Verify no loose connections, electrical shorts in the wiring or ground out to any metal object.
	Module.	- Turn the ON/OFF switch to the "OFF" position. Remove the igniter wire "I" from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" away from the "I" terminal on the module. If no spark, the module must be replaced. If there is a spark, the module is fine. Inspect pilot assembly for a shorted wire or cracked insulator around the electrode.
	Igniter Spark gap is incorrect.	- Spark gap of the ignitor to the pilot should be .12" or 1/8"
	Transformer.	- Verify the transformer is installed and plugged into the relay box. Check voltage of the transformer under load at the spade connections on the relay box with the ON/OFF switch in the "ON" position. Acceptable readings of a good transformer are between 2.8 and 3.4 volts A.C.
	A shorted or loose Connection.	- Remove and reinstall the wiring harness that plugs into the module. Remove and verify continuity of each wire in wiring harness.
	Battery backup	- Check batteries.
	Improper switch wiring.	- Troubleshoot the system with the simplest ON/OFF switch.

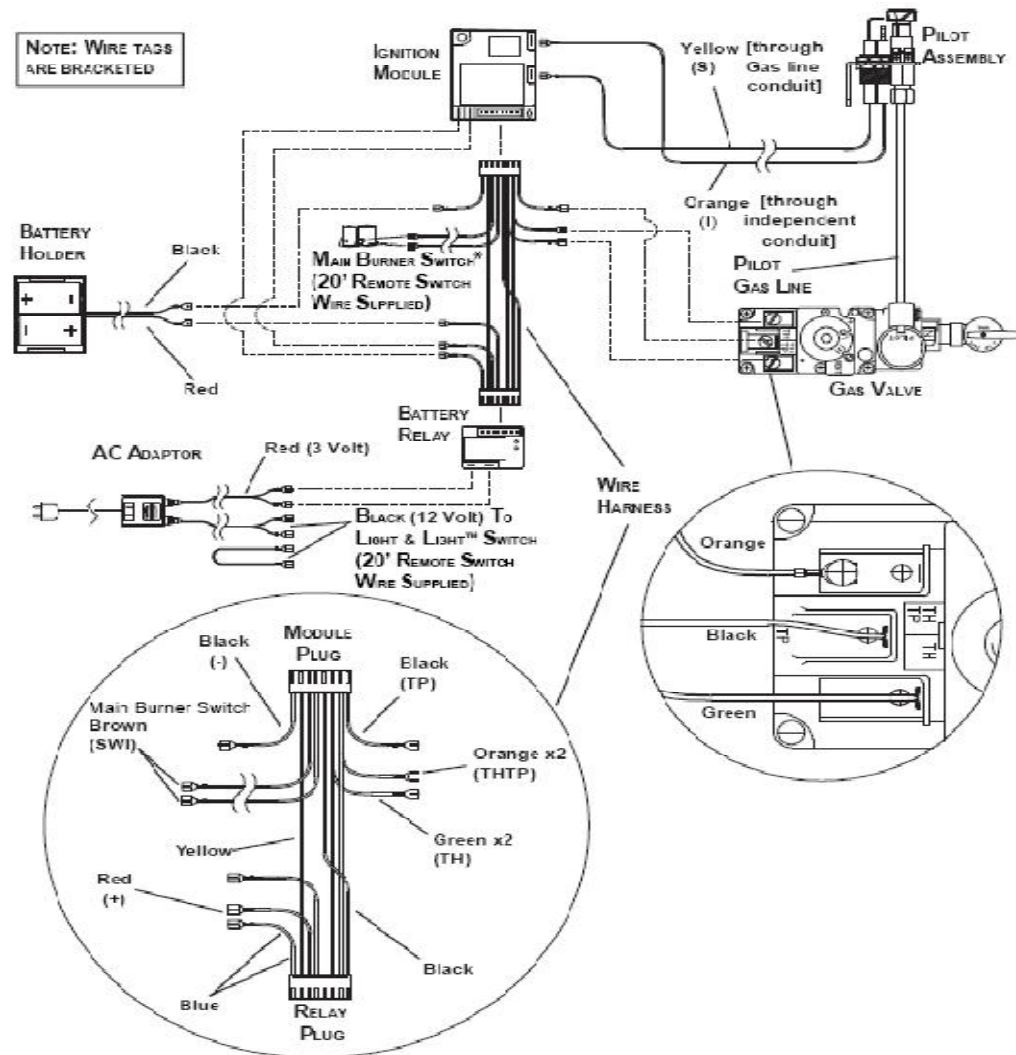
TEST THE AC POWER FROM THE TRANSFORMER 2.8 – 3.4 AC

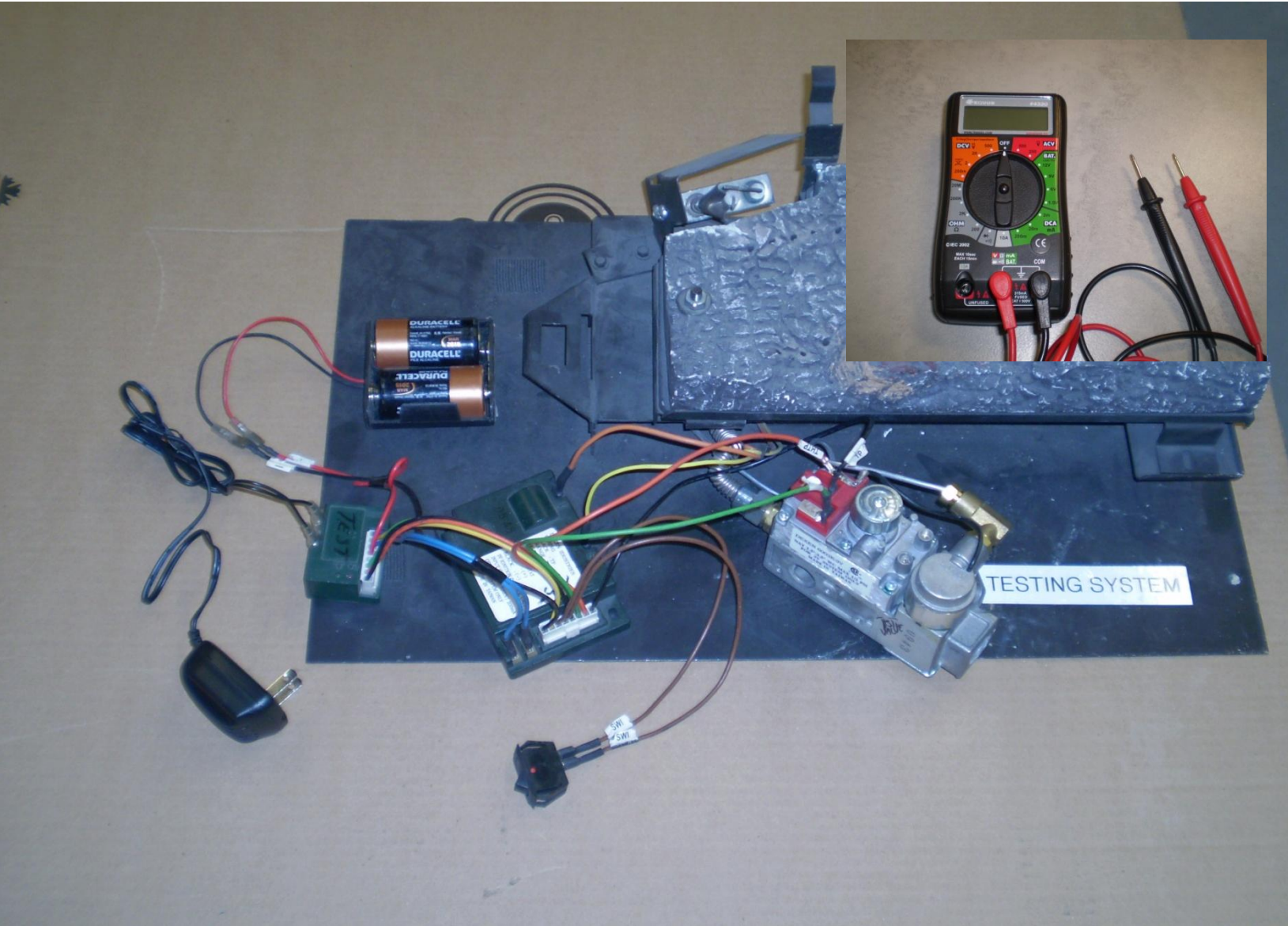




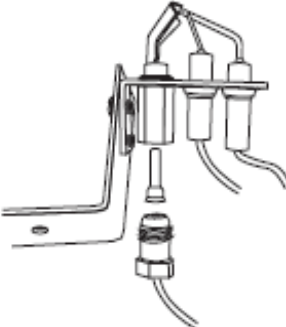
SYMPTOM	PROBLEM	TEST SOLUTION
Continues to spark and pilot lights, but main burner will not light.	Short or loose connection in sensor rod.	<ul style="list-style-type: none"> - Verify all connections. Verify the connections from the pilot assembly are tight; also verify these connections are not grounding out to any metal. - Verify the TH wires are connected to the valve.
	THTP	<ul style="list-style-type: none"> - Verify the THTP wires are connected to the valve.
Pilot light stops sparking / pilot remains lit but burner will not turn on.	Poor flame rectification or contaminated sensor rod.	<ul style="list-style-type: none"> - Verify the flame is engulfing the sensor rod. This will increase the flame rectification. Verify correct pilot orifice is installed and inlet gas specifications to manual. (Remember, the flame carries the rectification current, not the gas. If the flame lifts from the pilot hood, the circuit is broken. A wrong orifice or too high of an inlet pressure can cause the pilot flame to lift). The sensor rod may need cleaning.
	Wiring / connection.	<ul style="list-style-type: none"> - Inspect all wires, ensure good tight connections. Verify that all wiring is installed exactly as specified.
	Wiring harness.	<ul style="list-style-type: none"> - Inspect the wiring harness and verify the harness is tightly connected to the module. Verify that you have all wires connected and in the right order.
	Module or valve.	<ul style="list-style-type: none"> - Conduct the following test to verify if the problem is the module or valve. To measure voltages, turn the multimeter to "DC", place the red lead from the multimeter to the screw on the terminal block for the wire you are checking, touch black lead to ground (valve body). Importantly, a "zero" volts reading does not automatically indicate a bad module, there may be too little resistance in the valve solenoid. Check if the green wires is disconnected from the valve. The voltage output from the module should be between 1.5 and 3 volts.

GD 19

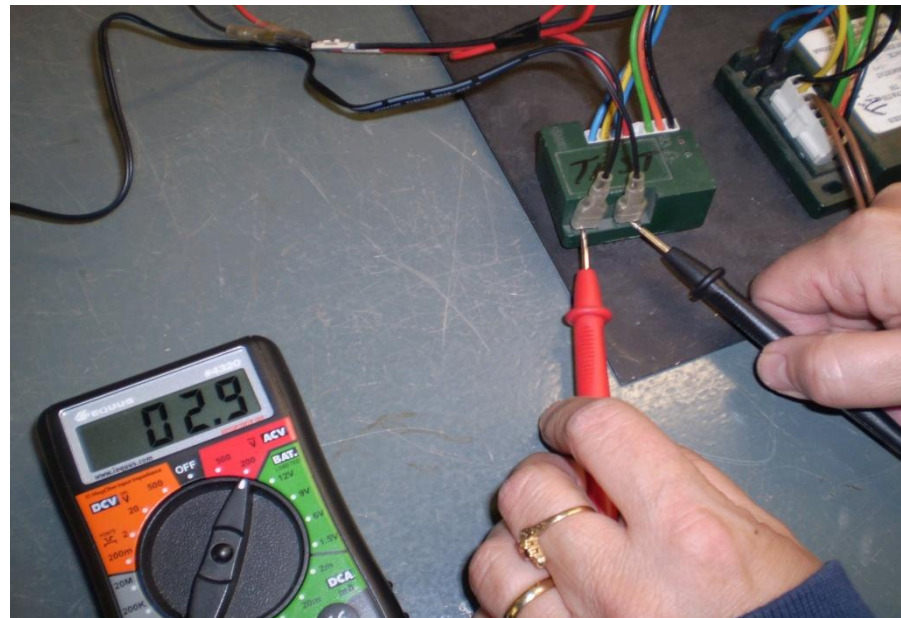
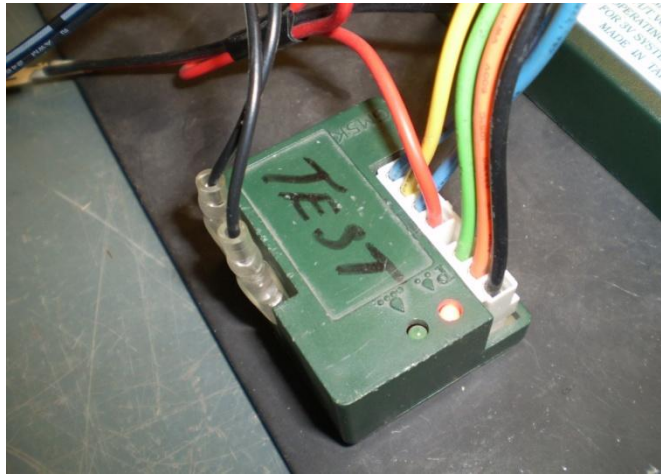


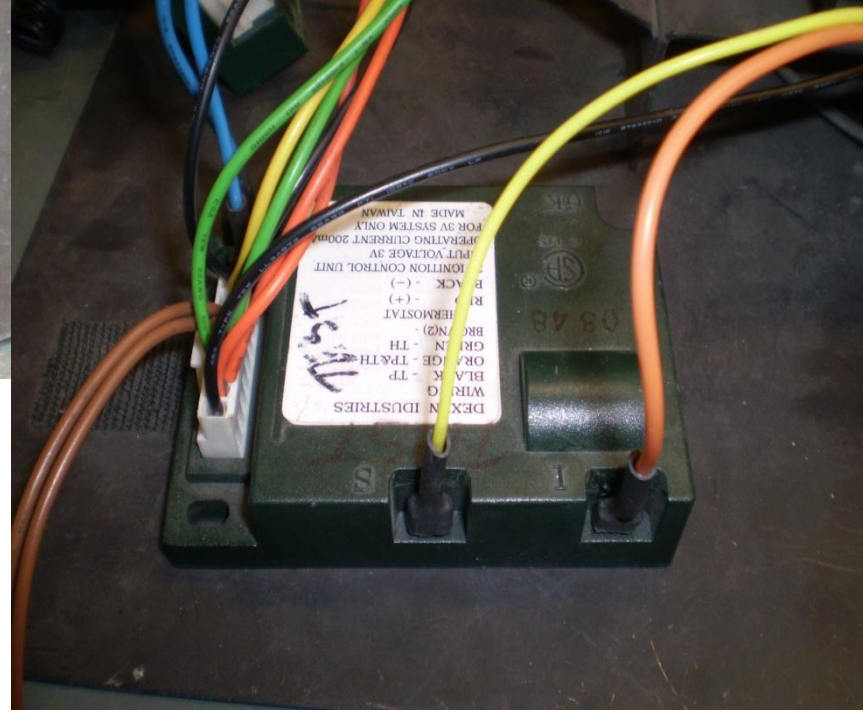
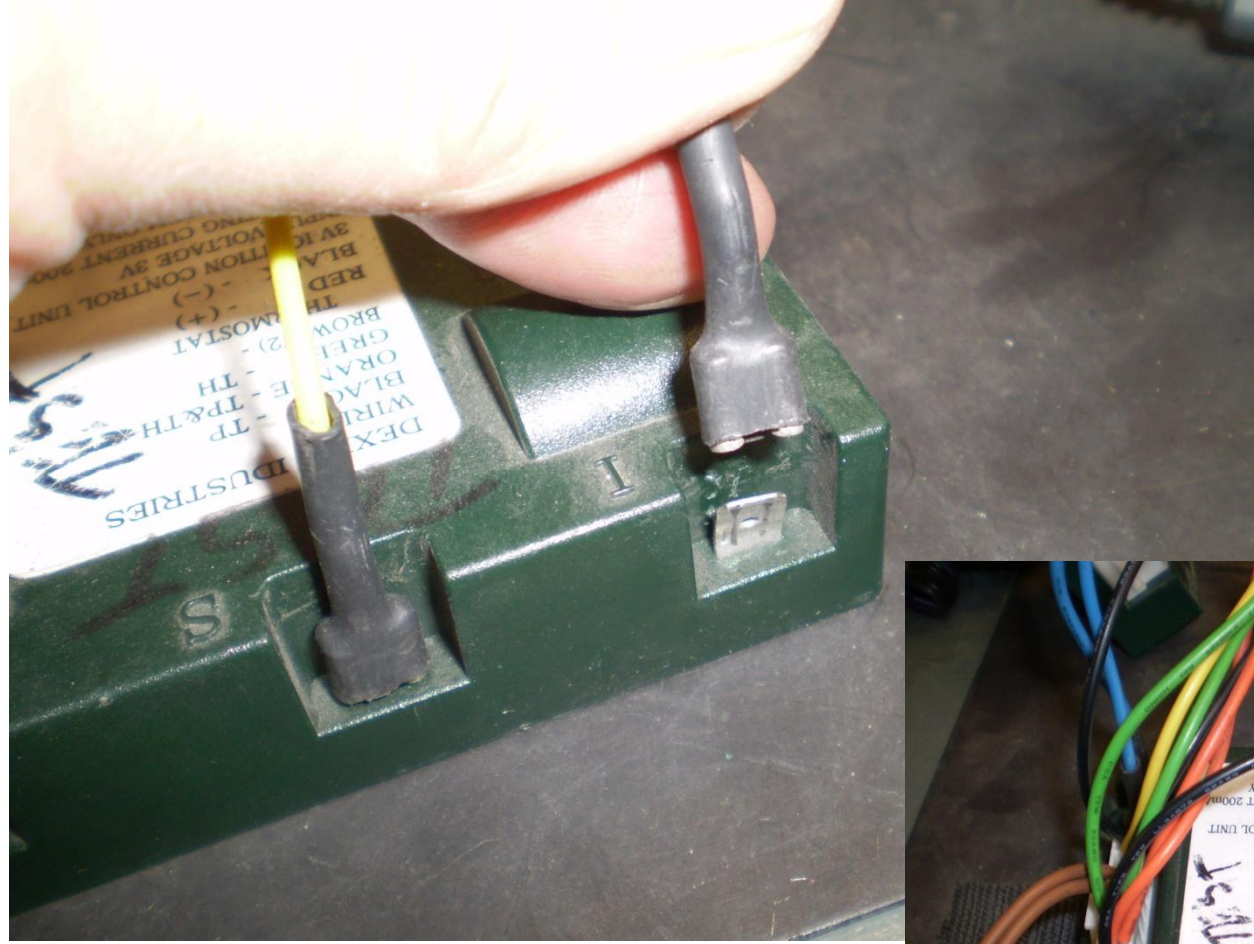


TESTING SYSTEM

SYMPTOM	PROBLEM	TEST SOLUTION
Pilot will not light.	Wiring.	- Verify the "S" wire for the sensor and the "I" wire for the ignitor are connected to the terminals on the module and pilot assembly.
Makes noise with no spark at pilot burner.	Loose connection.	- Verify no loose connections, electrical shorts in the wiring or ground out to any metal object.
	Module.	- Turn the ON/OFF switch to the "OFF" position. Remove the igniter wire "I" from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" away from the "I" terminal on the module. If no spark, the module must be replaced. If there is a spark, the module is fine. Inspect pilot assembly for a shorted wire or cracked insulator around the electrode.
	Igniter Spark gap is incorrect.	- Spark gap of the ignitor to the pilot should be .12" or 1/8"
	Transformer.	- Verify the transformer is installed and plugged into the relay box. Check voltage of the transformer under load at the spade connections on the relay box with the ON/OFF switch in the "ON" position. Acceptable readings of a good transformer are between 2.8 and 3.4 volts A.C.
	A shorted or loose Connection.	- Remove and reinstall the wiring harness that plugs into the module. Remove and verify continuity of each wire in wiring harness.
	Battery backup	- Check batteries.
	Improper switch wiring.	- Troubleshoot the system with the simplest ON/OFF switch.

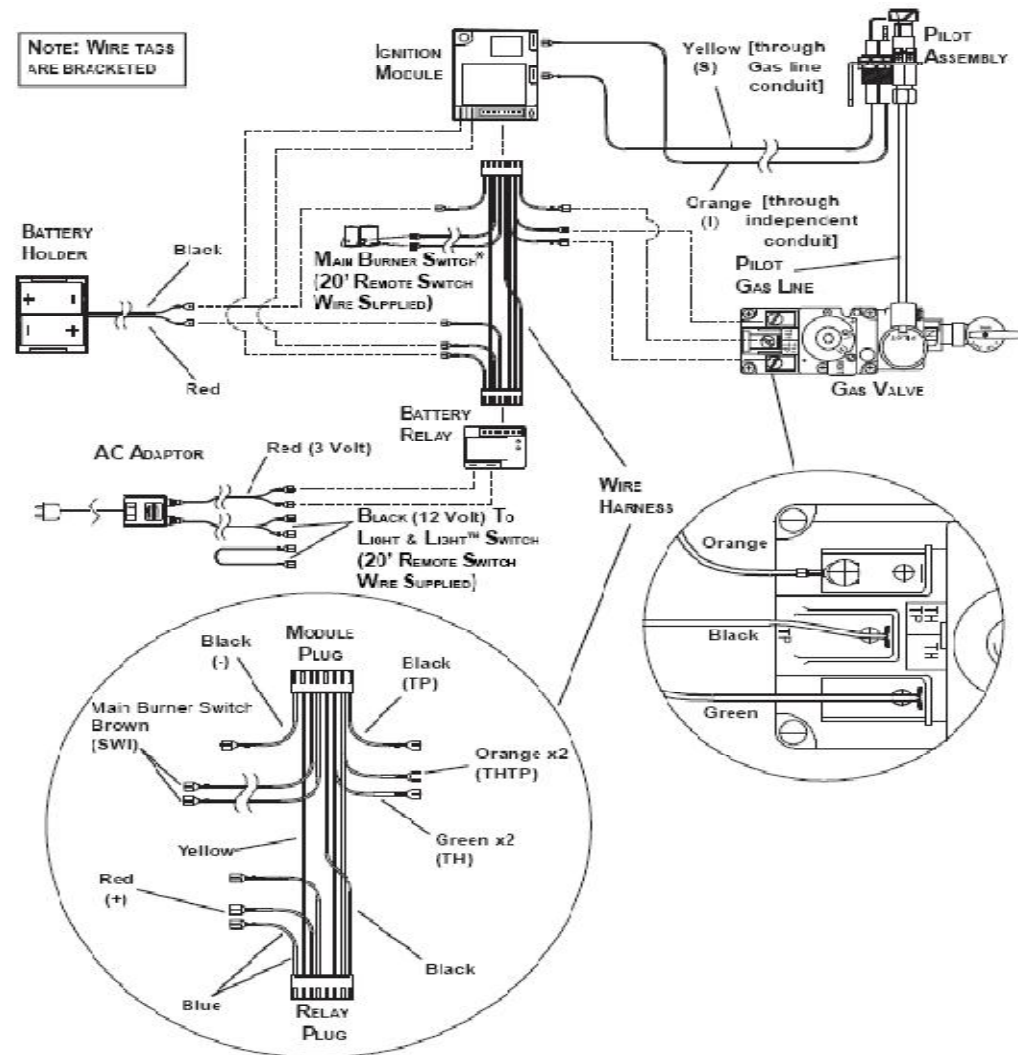
TEST THE AC POWER FROM THE TRANSFORMER 2.8 – 3.4 AC

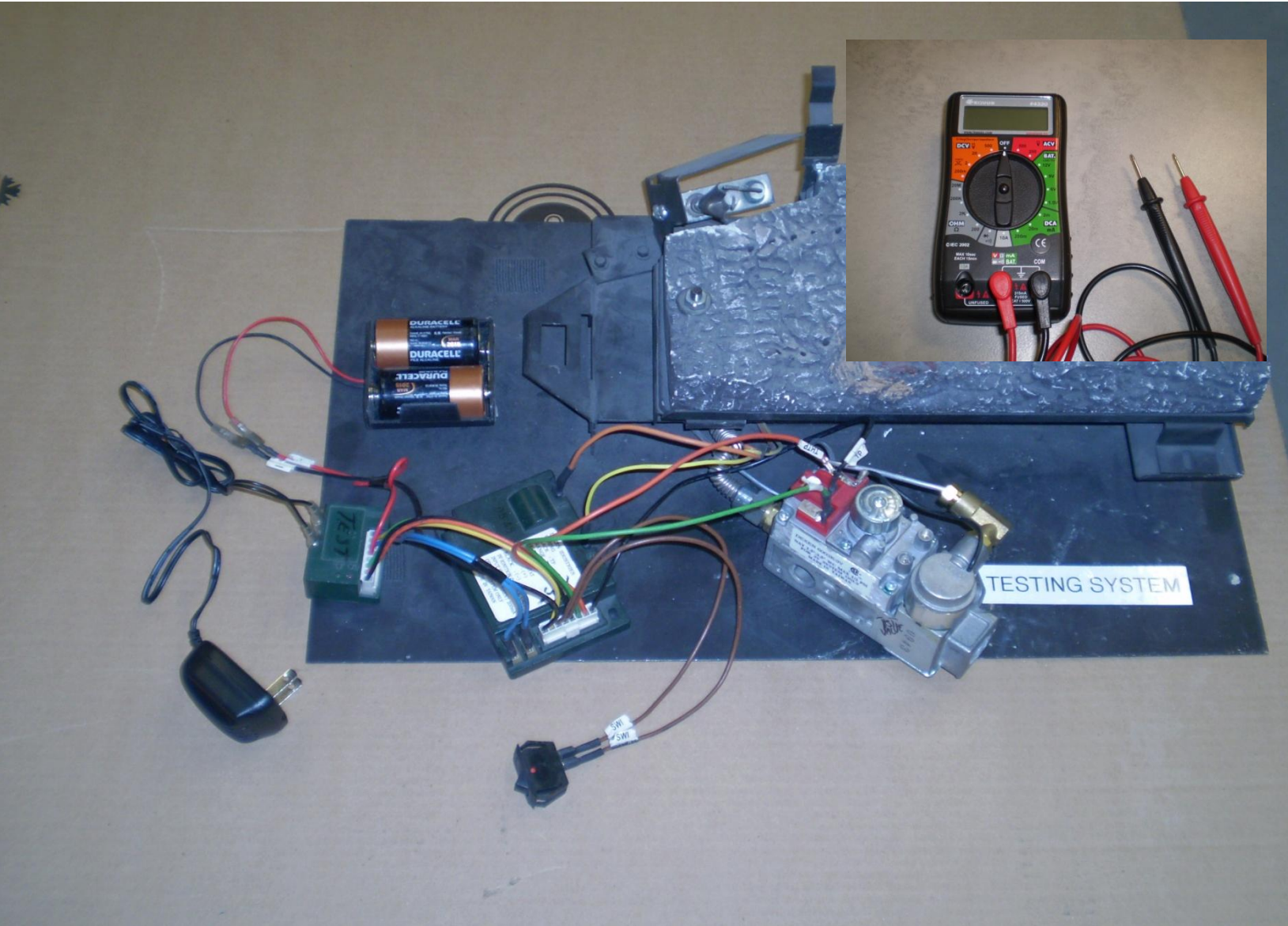




SYMPTOM	PROBLEM	TEST SOLUTION
Continues to spark and pilot lights, but main burner will not light.	Short or loose connection in sensor rod.	<ul style="list-style-type: none"> - Verify all connections. Verify the connections from the pilot assembly are tight; also verify these connections are not grounding out to any metal. - Verify the TH wires are connected to the valve.
	THTP	<ul style="list-style-type: none"> - Verify the THTP wires are connected to the valve.
	Poor flame rectification or contaminated sensor rod.	<ul style="list-style-type: none"> - Verify the flame is engulfing the sensor rod. This will increase the flame rectification. Verify correct pilot orifice is installed and inlet gas specifications to manual. (Remember, the flame carries the rectification current, not the gas. If the flame lifts from the pilot hood, the circuit is broken. A wrong orifice or too high of an inlet pressure can cause the pilot flame to lift). The sensor rod may need cleaning.
Pilot light stops sparking / pilot remains lit but burner will not turn on.	Wiring / connection.	<ul style="list-style-type: none"> - Inspect all wires, ensure good tight connections. Verify that all wiring is installed exactly as specified.
	Wiring harness.	<ul style="list-style-type: none"> - Inspect the wiring harness and verify the harness is tightly connected to the module. Verify that you have all wires connected and in the right order.
	Module or valve.	<ul style="list-style-type: none"> - Conduct the following test to verify if the problem is the module or valve. To measure voltages, turn the multimeter to "DC", place the red lead from the multimeter to the screw on the terminal block for the wire you are checking, touch black lead to ground (valve body). Importantly, a "zero" volts reading does not automatically indicate a bad module, there may be too little resistance in the valve solenoid. Check if the green wires is disconnected from the valve. The voltage output from the module should be between 1.5 and 3 volts.

GD36 MN MANHATTAN





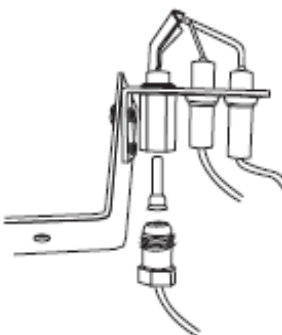
DURACELL
DURACELL
DURACELL

7805

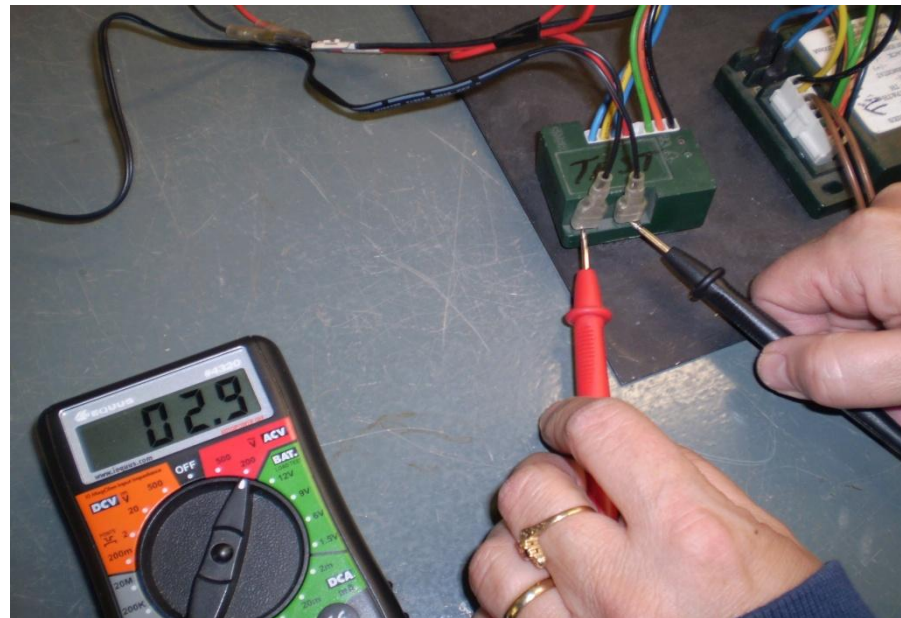
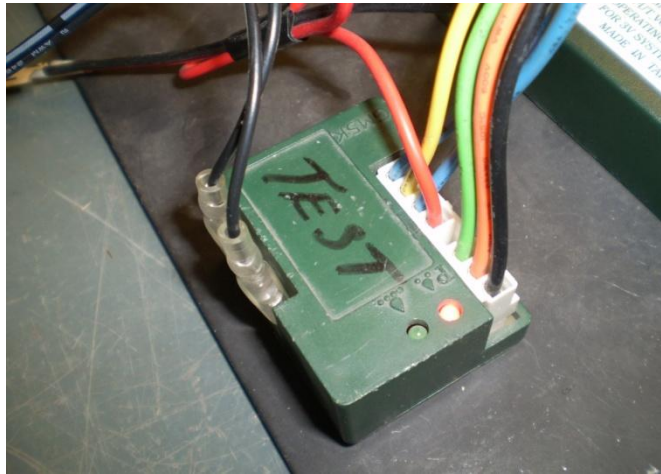
TESTING SYSTEM

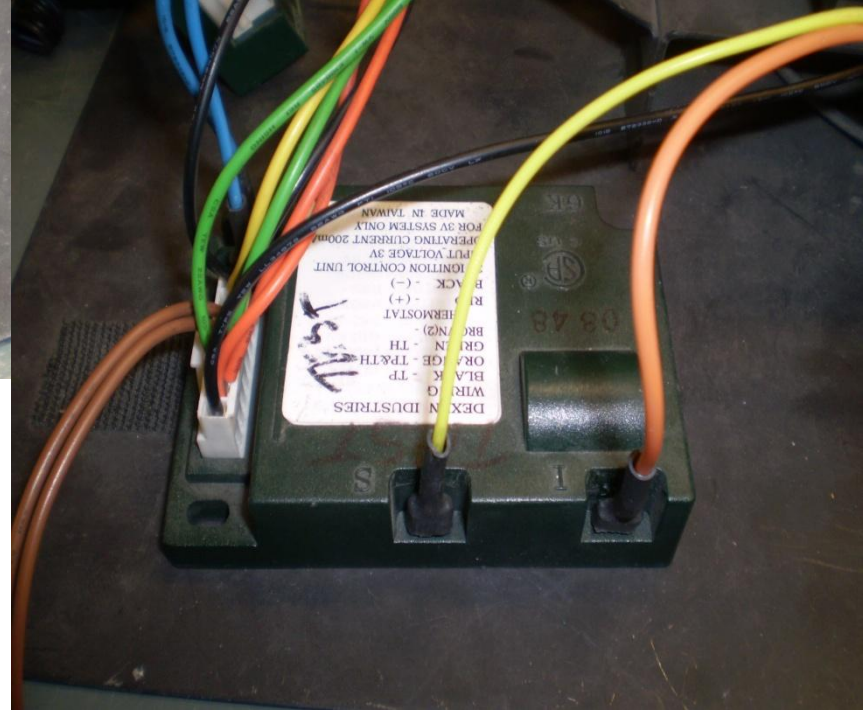
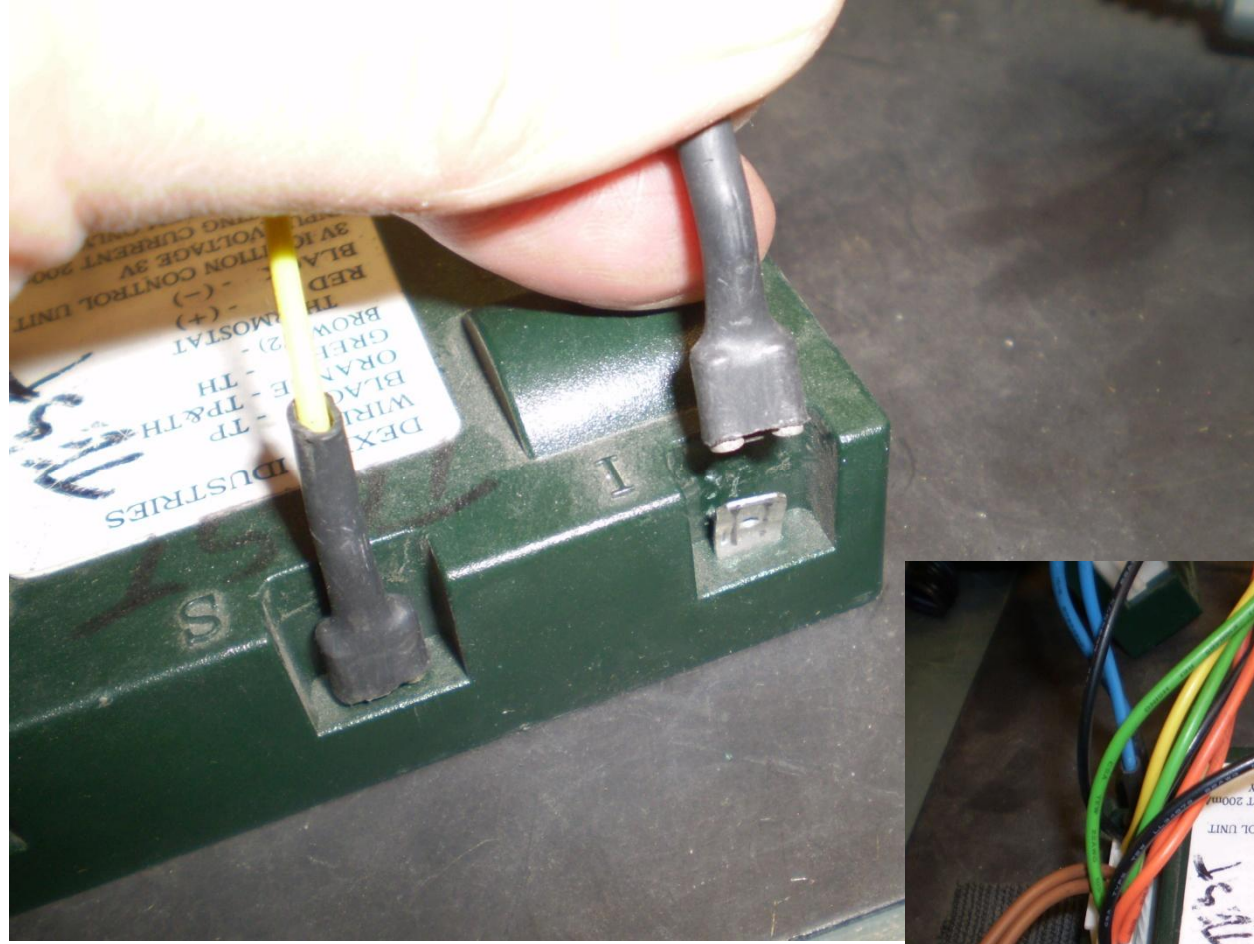
SW
SW



SYMPTOM	PROBLEM	TEST SOLUTION
Pilot will not light.	Wiring.	- Verify the "S" wire for the sensor and the "I" wire for the ignitor are connected to the terminals on the module and pilot assembly.
Makes noise with no spark at pilot burner.	Loose connection.	- Verify no loose connections, electrical shorts in the wiring or ground out to any metal object.
	Module.	- Turn the ON/OFF switch to the "OFF" position. Remove the igniter wire "I" from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" away from the "I" terminal on the module. If no spark, the module must be replaced. If there is a spark, the module is fine. Inspect pilot assembly for a shorted wire or cracked insulator around the electrode.
	Igniter Spark gap is incorrect.	- Spark gap of the ignitor to the pilot should be .12" or 1/8"
	Transformer.	- Verify the transformer is installed and plugged into the relay box. Check voltage of the transformer under load at the spade connections on the relay box with the ON/OFF switch in the "ON" position. Acceptable readings of a good transformer are between 2.8 and 3.4 volts A.C.
	A shorted or loose Connection.	- Remove and reinstall the wiring harness that plugs into the module. Remove and verify continuity of each wire in wiring harness.
	Battery backup	- Check batteries.
	Improper switch wiring.	- Troubleshoot the system with the simplest ON/OFF switch.

TEST THE AC POWER FROM THE TRANSFORMER 2.8 – 3.4 AC

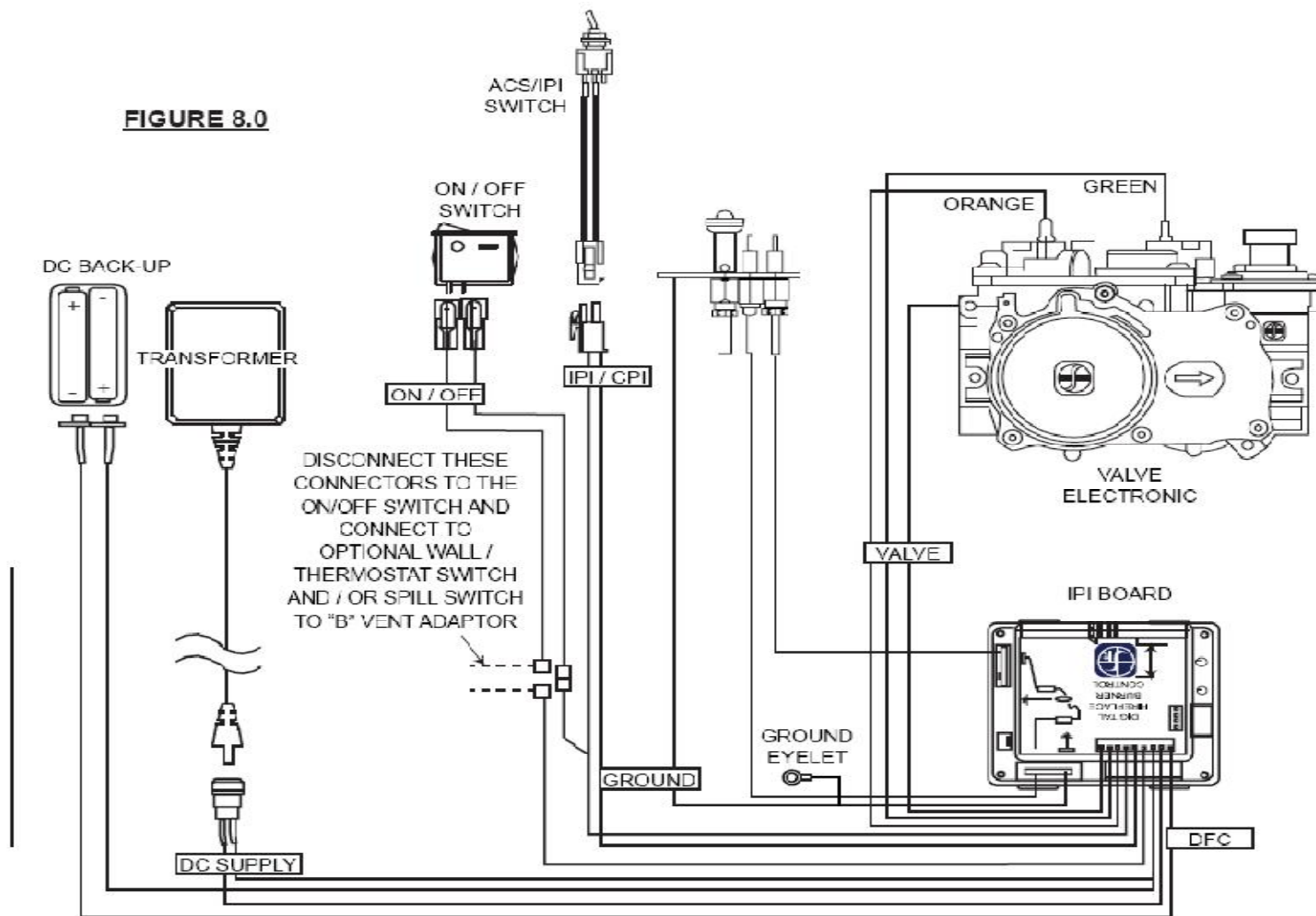


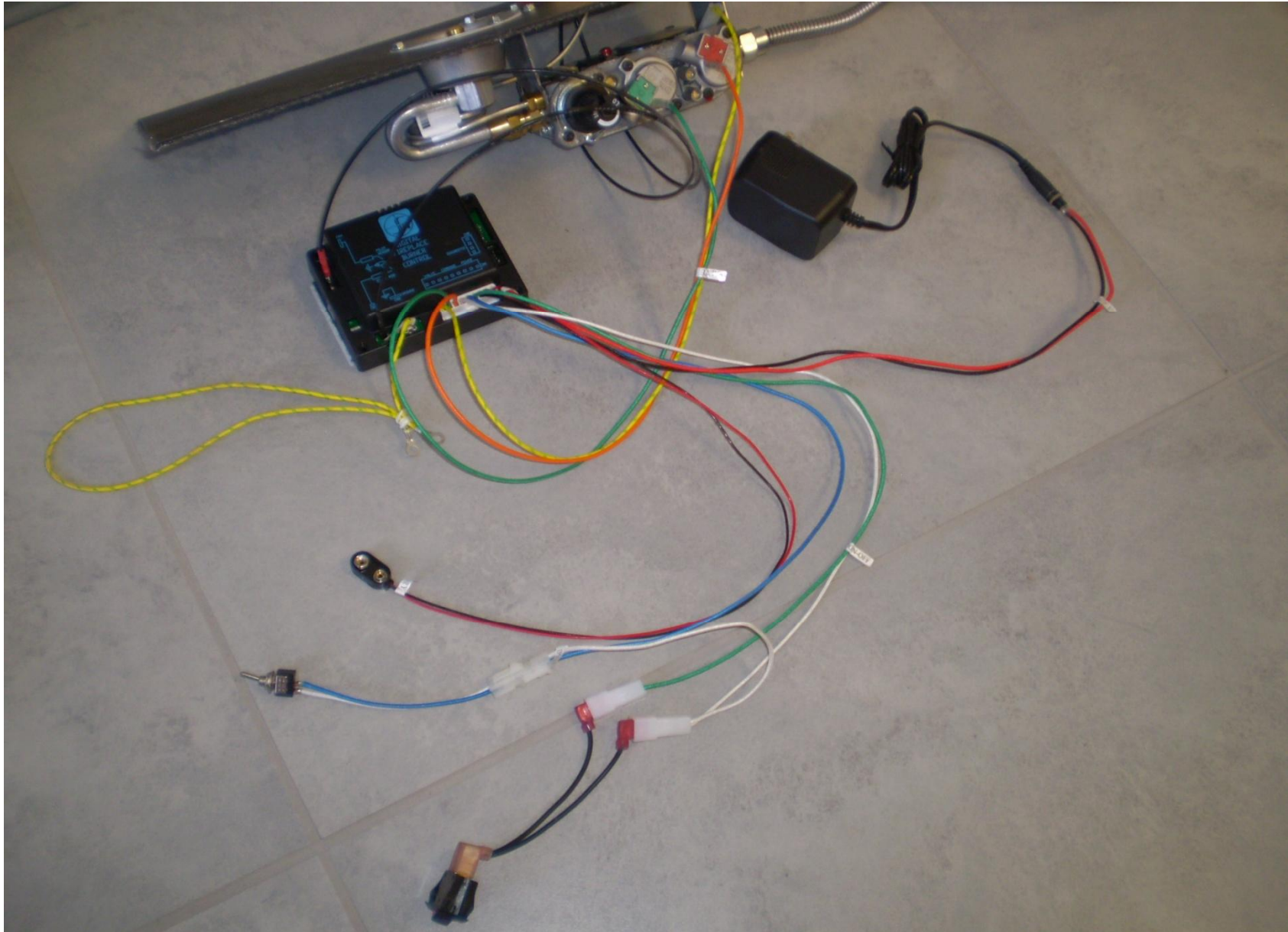


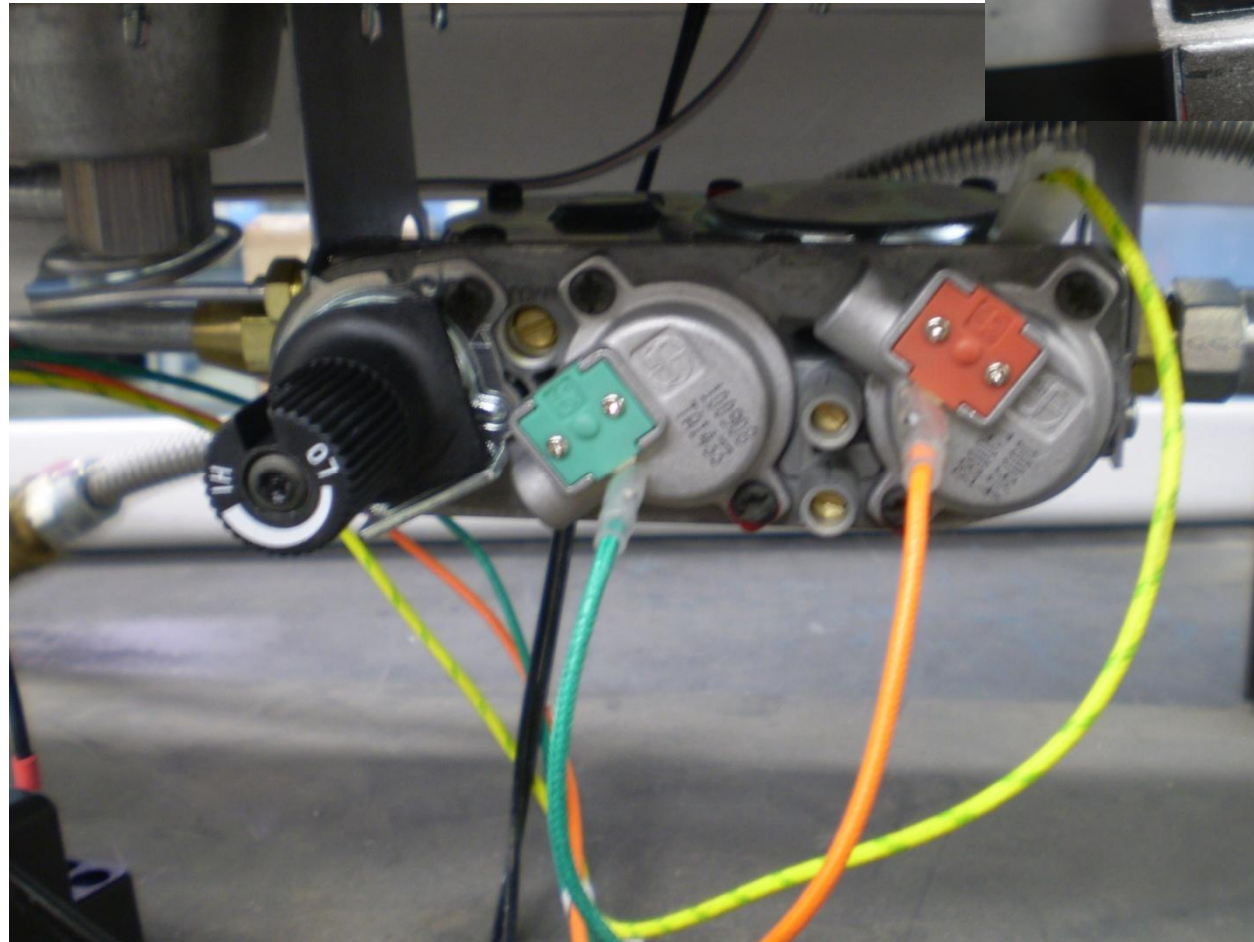
SYMPTOM	PROBLEM	TEST SOLUTION
Continues to spark and pilot lights, but main burner will not light.	Short or loose connection in sensor rod.	<ul style="list-style-type: none"> - Verify all connections. Verify the connections from the pilot assembly are tight; also verify these connections are not grounding out to any metal. - Verify the TH wires are connected to the valve.
	THTP	<ul style="list-style-type: none"> - Verify the THTP wires are connected to the valve.
	Poor flame rectification or contaminated sensor rod.	<ul style="list-style-type: none"> - Verify the flame is engulfing the sensor rod. This will increase the flame rectification. Verify correct pilot orifice is installed and inlet gas specifications to manual. (Remember, the flame carries the rectification current, not the gas. If the flame lifts from the pilot hood, the circuit is broken. A wrong orifice or too high of an inlet pressure can cause the pilot flame to lift). The sensor rod may need cleaning.
Pilot light stops sparking / pilot remains lit but burner will not turn on.	Wiring / connection.	<ul style="list-style-type: none"> - Inspect all wires, ensure good tight connections. Verify that all wiring is installed exactly as specified.
	Wiring harness.	<ul style="list-style-type: none"> - Inspect the wiring harness and verify the harness is tightly connected to the module. Verify that you have all wires connected and in the right order.
	Module or valve.	<ul style="list-style-type: none"> - Conduct the following test to verify if the problem is the module or valve. To measure voltages, turn the multimeter to "DC", place the red lead from the multimeter to the screw on the terminal block for the wire you are checking, touch black lead to ground (valve body). Importantly, a "zero" volts reading does not automatically indicate a bad module, there may be too little resistance in the valve solenoid. Check if the green wires is disconnected from the valve. The voltage output from the module should be between 1.5 and 3 volts.

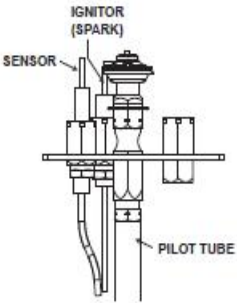
GDS60-1

FIGURE 8.0

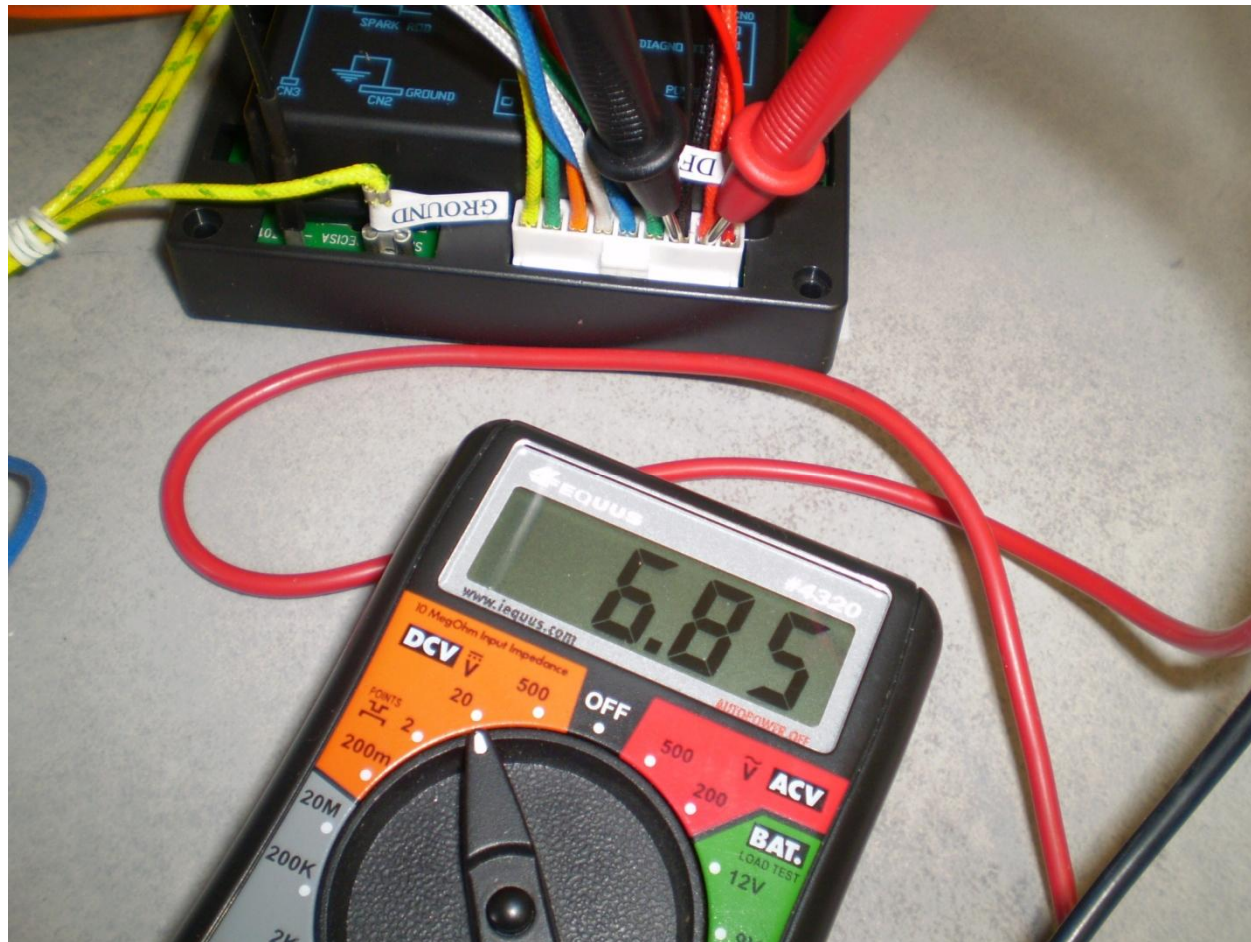


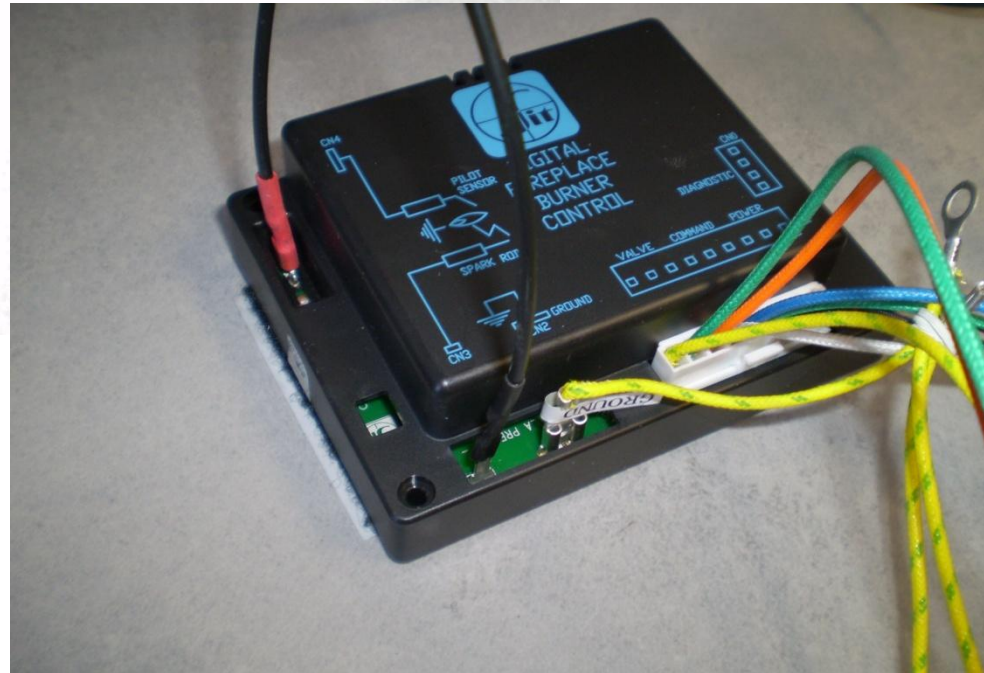
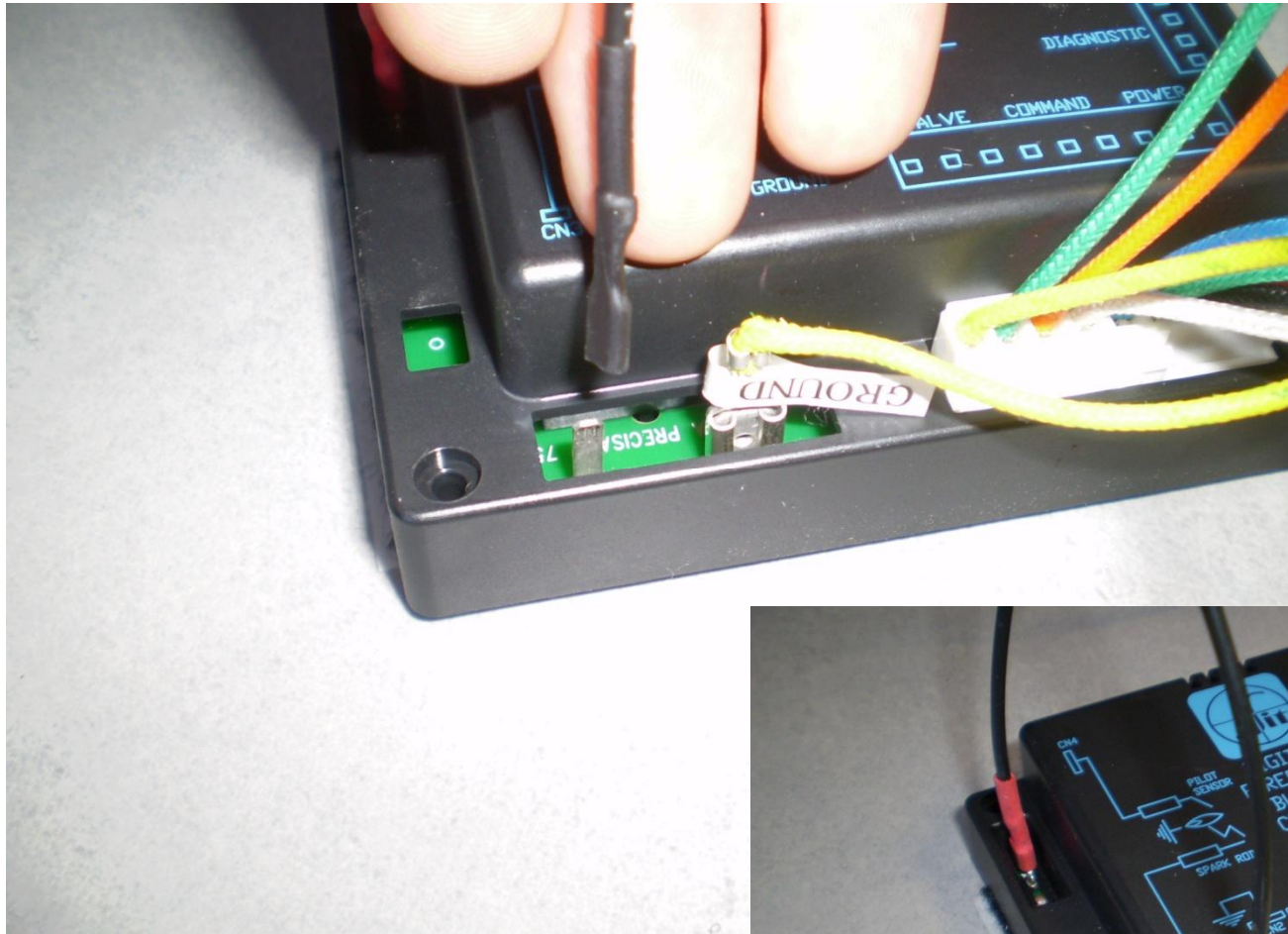




SYMPTOM	PROBLEM	TEST SOLUTION
Pilot will not light. Makes noise with no spark at pilot burner. 	Wiring.	- Verify the wire for the sensor and the wire for the ignitor are connected to the correct terminals (not reversed) on the module. NOTE: Sensor has 3/16" connection and ignitor has 1/8" connection.
	Loose connection.	- Verify no loose connections, electrical shorts in the wiring or ground out to any metal object.
	Module.	- Turn the ON/OFF switch to the "OFF" position. Remove the igniter wire from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" away from the ignitor (spark) terminal on the module. If no spark the ignitor terminal module must be replaced. If there is a spark the ignitor terminal is fine. Inspect pilot assembly for a shorted wire or cracked insulator around the electrode.
	Igniter Spark gap is incorrect.	- Spark gap of the ignitor to the pilot should be 1/8".
	Transformer.	- Verify the transformer is installed and plugged into the module. Check voltage of the transformer under load at the spade connections on the module with the ON/OFF switch in the "ON" position. Acceptable readings of a good transformer are between 6.2 and 7.0 volts A.C.
	Battery backup	- Check batteries.
	A shorted or loose Connection.	- Remove and reinstall the wiring harness that plugs into the module. Remove and verify continuity of each wire in wiring harness.
	Improper switch wiring.	- Troubleshoot the system with the simplest ON/OFF switch.
	Module is not grounded.	- Verify the valve and pilot assemblies are properly grounded to the metal chassis of the appliance or log set.
	Pilot sparks but will not light.	Gas supply.
Out of propane gas.		- Fill the tank.

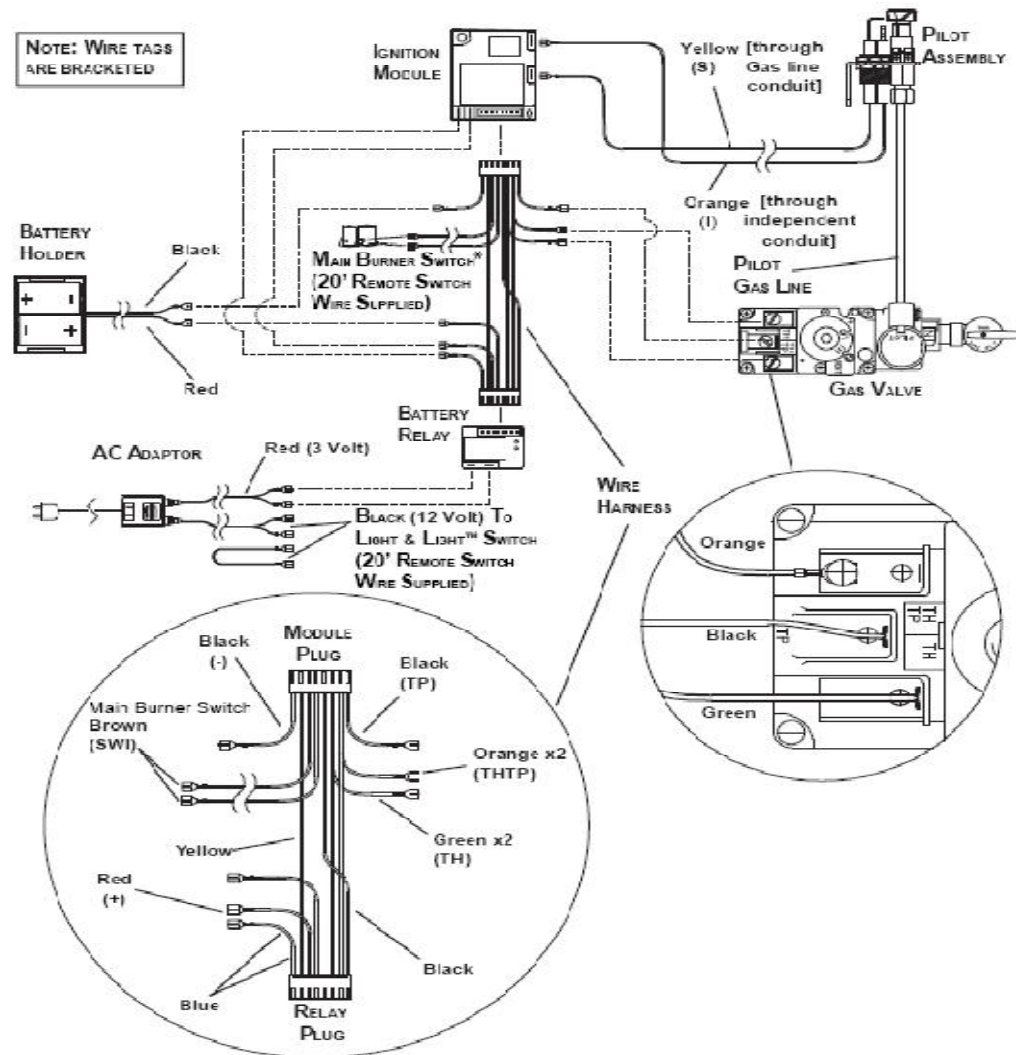
TRANSFORMER OUTPUT UNDER LOAD 6.2- 7.0 DC

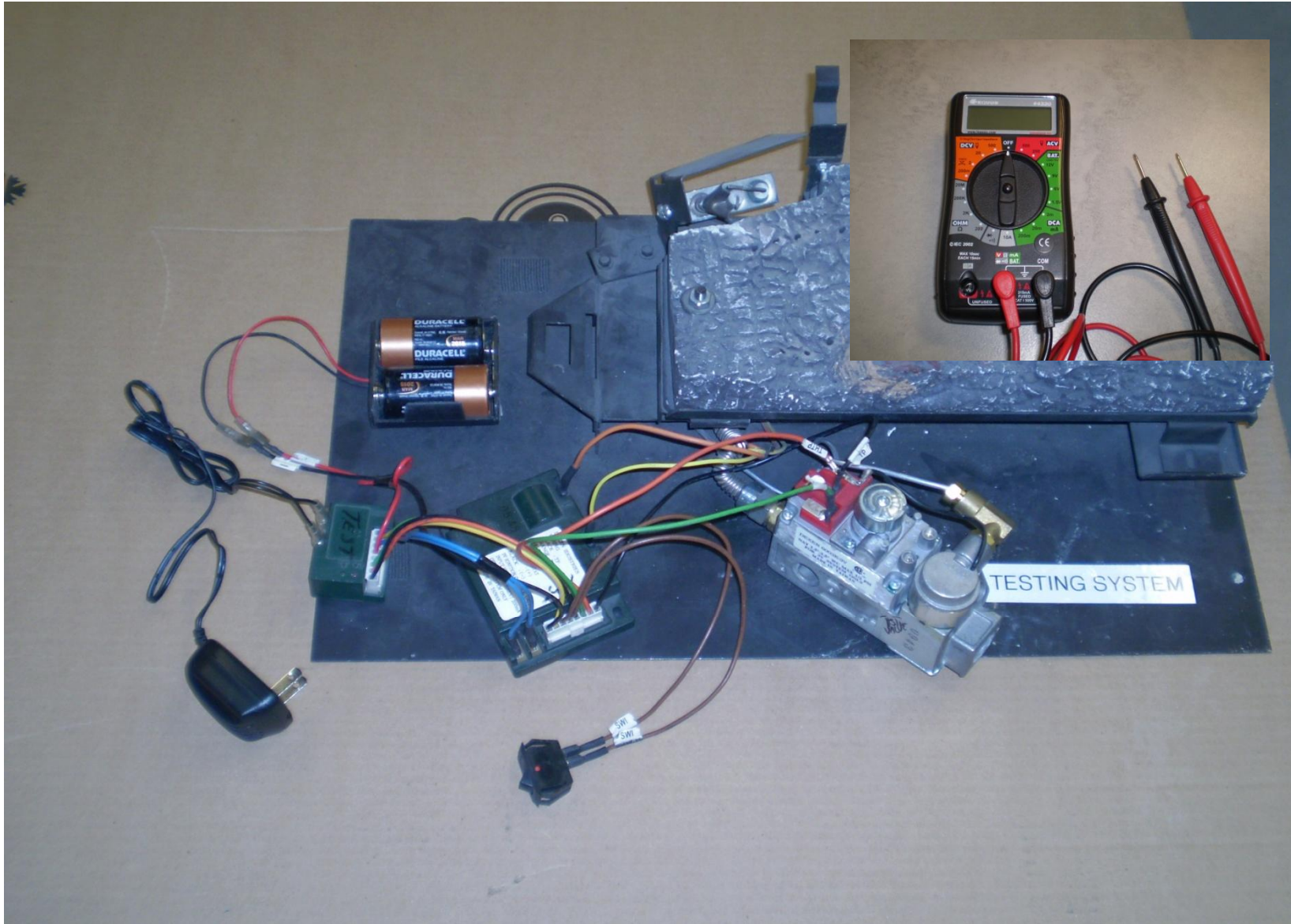




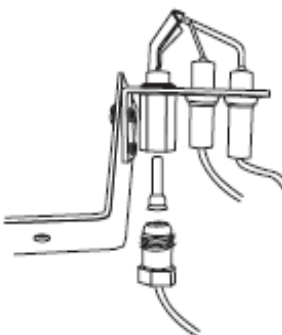
SYMPTOM	PROBLEM	TEST SOLUTION
Continues to spark and pilot lights, but main burner will not light.	Short or loose connection in sensor rod.	- Verify all connections. Verify the connections from the pilot assembly are tight; also verify these connections are not grounding out to any metal.
	Poor flame rectification or contaminated sensor rod.	- Verify the flame is engulfing the sensor rod. This will increase the flame rectification. Verify correct pilot orifice is installed and inlet gas specifications to manual. (Remember, the flame carries the rectification current, not the gas. If the flame lifts from pilot hood, the circuit is broken. A wrong orifice or too high of an inlet pressure can cause the pilot flame to lift.) The sensor rod may need cleaning.
	Poor grounding between pilot assembly and gas valve.	- Verify that the wire harness is firmly connected to module. Verify that the ceramic insulator around the sensor rod is not cracked, damaged, or loose. Verify the connection from the sensor rod to the sensor wire.
	Damaged pilot or dirty sensor rod.	- Clean sensor rod with an emery cloth to remove any contamination that may have accumulated on the sensor rod. Verify continuity with multimeter with ohms set at the lowest range.
Pilot lights Stops sparking / pilot remains lit but burner will not turn on.	Wiring / Connection.	- Inspect all wires, ensure good tight connections. Verify that all wiring is installed exactly as specified.
	Wiring harness.	- Inspect the wiring harness, and verify the harness is tightly connected to the module. Verify that all wires are connected in the right order. See "WIRING DIAGRAM" section.

GDS25- GDS26

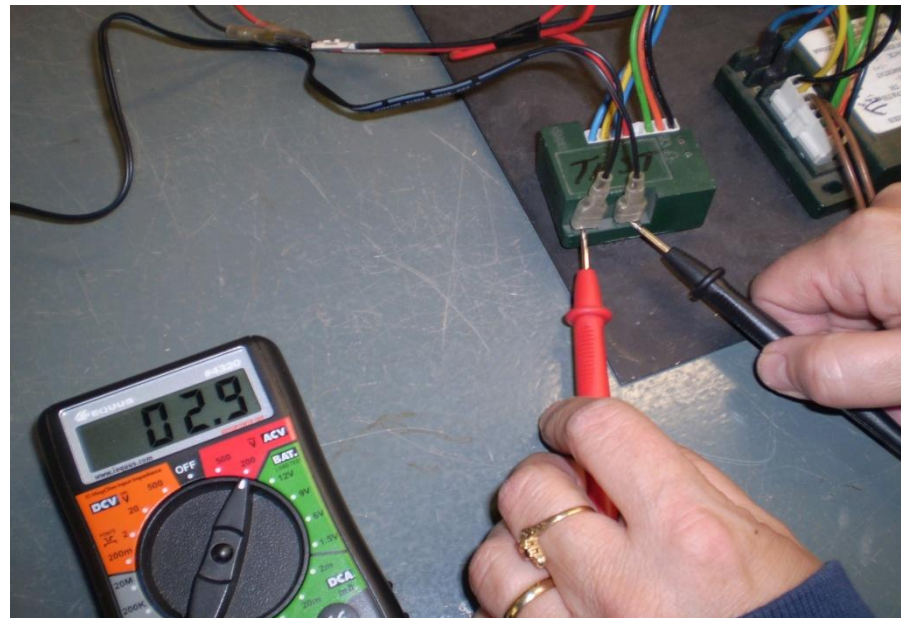
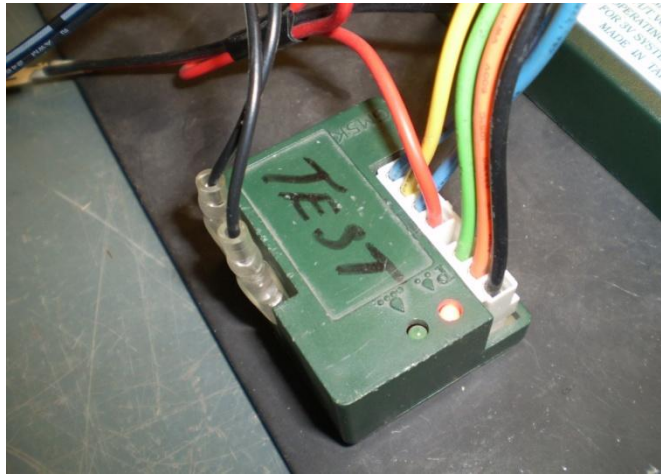


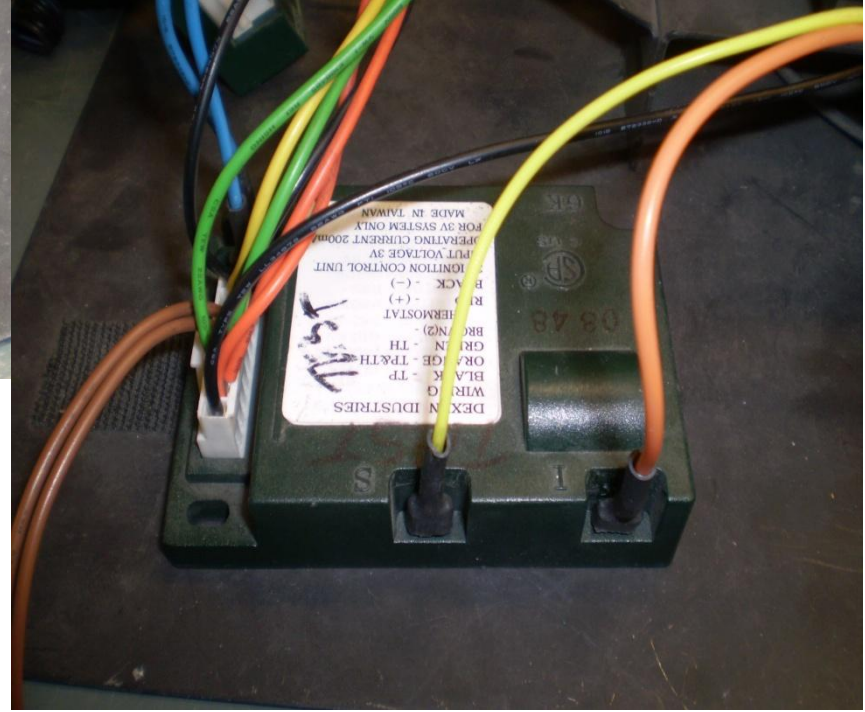
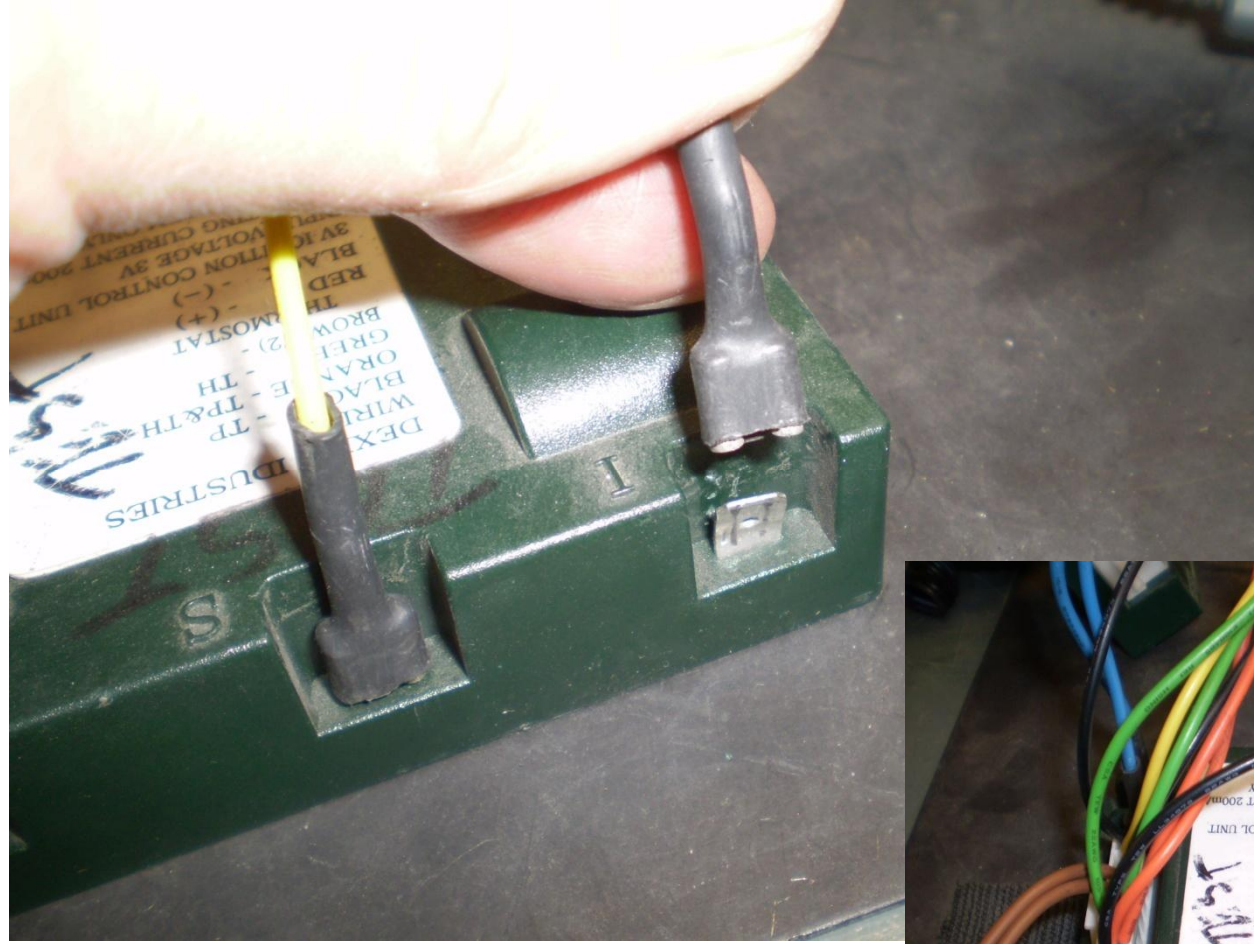


TESTING SYSTEM

SYMPTOM	PROBLEM	TEST SOLUTION
Pilot will not light.	Wiring.	- Verify the "S" wire for the sensor and the "I" wire for the ignitor are connected to the terminals on the module and pilot assembly.
Makes noise with no spark at pilot burner.	Loose connection.	- Verify no loose connections, electrical shorts in the wiring or ground out to any metal object.
	Module.	- Turn the ON/OFF switch to the "OFF" position. Remove the igniter wire "I" from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" away from the "I" terminal on the module. If no spark, the module must be replaced. If there is a spark, the module is fine. Inspect pilot assembly for a shorted wire or cracked insulator around the electrode.
	Igniter Spark gap is incorrect.	- Spark gap of the ignitor to the pilot should be .12" or 1/8"
	Transformer.	- Verify the transformer is installed and plugged into the relay box. Check voltage of the transformer under load at the spade connections on the relay box with the ON/OFF switch in the "ON" position. Acceptable readings of a good transformer are between 2.8 and 3.4 volts A.C.
	A shorted or loose Connection.	- Remove and reinstall the wiring harness that plugs into the module. Remove and verify continuity of each wire in wiring harness.
	Battery backup	- Check batteries.
	Improper switch wiring.	- Troubleshoot the system with the simplest ON/OFF switch.

TEST THE AC POWER FROM THE TRANSFORMER 2.8 – 3.4 AC





SYMPTOM	PROBLEM	TEST SOLUTION
Continues to spark and pilot lights, but main burner will not light.	Short or loose connection in sensor rod.	<ul style="list-style-type: none"> - Verify all connections. Verify the connections from the pilot assembly are tight; also verify these connections are not grounding out to any metal. - Verify the TH wires are connected to the valve.
	THTP	<ul style="list-style-type: none"> - Verify the THTP wires are connected to the valve.
	Poor flame rectification or contaminated sensor rod.	<ul style="list-style-type: none"> - Verify the flame is engulfing the sensor rod. This will increase the flame rectification. Verify correct pilot orifice is installed and inlet gas specifications to manual. (Remember, the flame carries the rectification current, not the gas. If the flame lifts from the pilot hood, the circuit is broken. A wrong orifice or too high of an inlet pressure can cause the pilot flame to lift). The sensor rod may need cleaning.
Pilot light stops sparking / pilot remains lit but burner will not turn on.	Wiring / connection.	<ul style="list-style-type: none"> - Inspect all wires, ensure good tight connections. Verify that all wiring is installed exactly as specified.
	Wiring harness.	<ul style="list-style-type: none"> - Inspect the wiring harness and verify the harness is tightly connected to the module. Verify that you have all wires connected and in the right order.
	Module or valve.	<ul style="list-style-type: none"> - Conduct the following test to verify if the problem is the module or valve. To measure voltages, turn the multimeter to "DC", place the red lead from the multimeter to the screw on the terminal block for the wire you are checking, touch black lead to ground (valve body). Importantly, a "zero" volts reading does not automatically indicate a bad module, there may be too little resistance in the valve solenoid. Check if the green wires is disconnected from the valve. The voltage output from the module should be between 1.5 and 3 volts.

ACS SWITCH- DEXEN SYSTEM

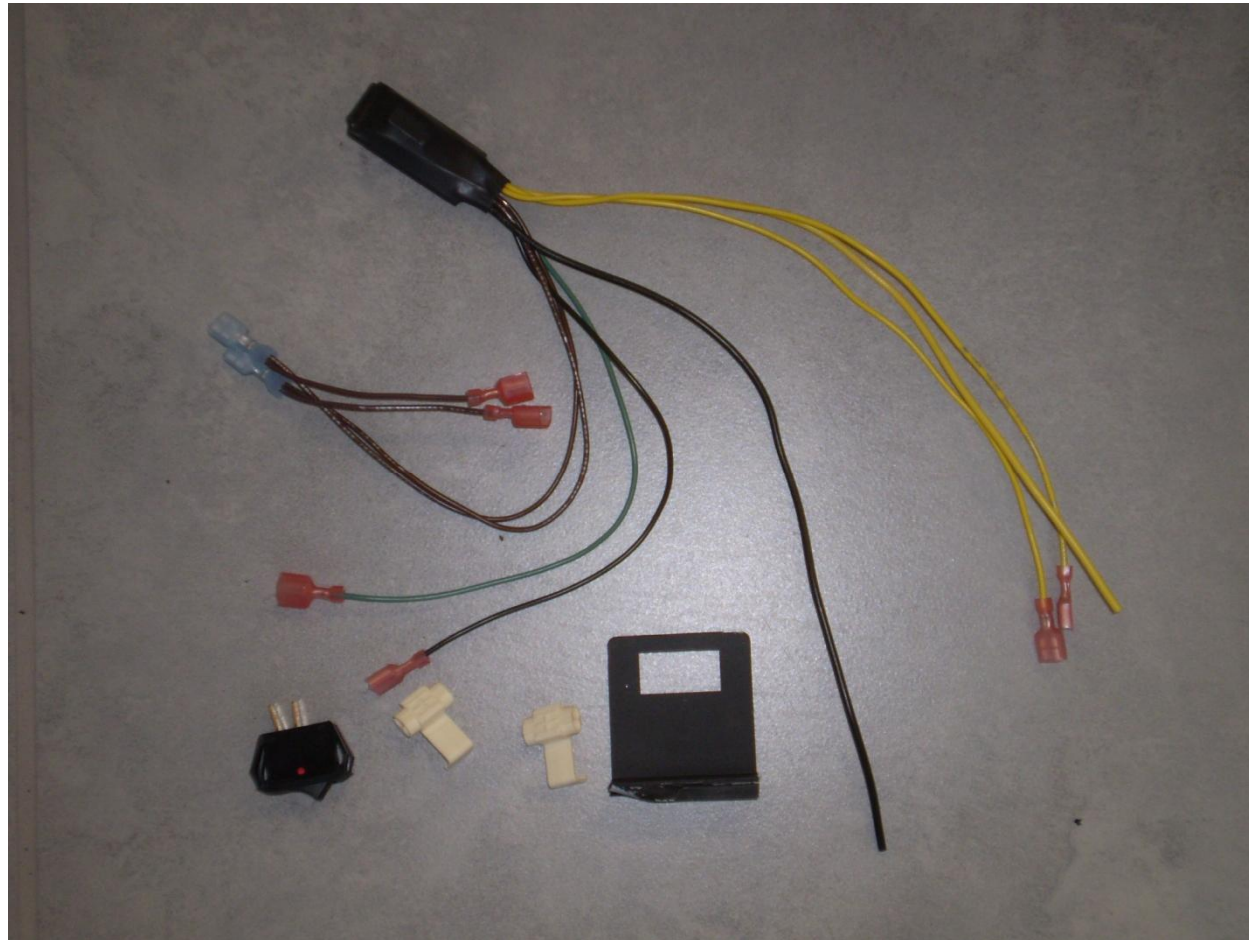


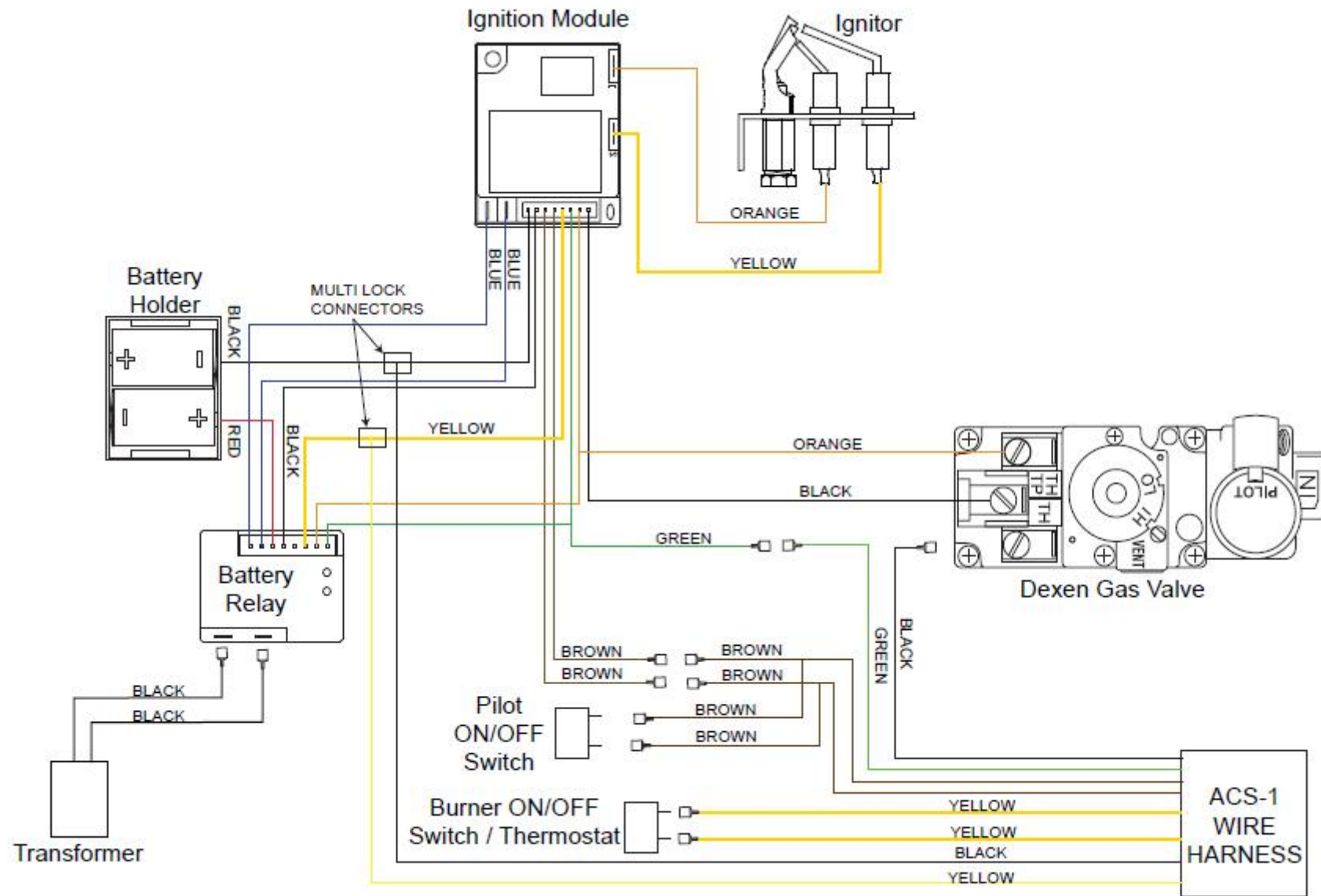
DEXEN ANTI-CONDENSATION SWITCH (ACS-1) INSTALLATION INSTRUCTIONS



1. Turn off electrical power.
2. Disconnect the green wire labelled (TH) from the valve and connect it to the green wire from the ACS-1 wire harness.
3. Connect the black wire with flag from the ACS-1 wire harness to the valve marked (TH).
4. Disconnect the switch from the 2 brown wires located in the control compartment. Connect the brown wires from the ignition module to the brown wires from the ACS-1 wire harness. Connect the switch to the second set of brown wires. This switch controls the pilot function (standing or intermittent).
5. Connect the yellow wires with flags to a wall switch/thermostat or to the switch and switch bracket supplied. Install the switch into the switch bracket and connect the 2 yellow wires to the switch. Remove the back side of the double sided tape and secure the bracket in a convenient location in the valve compartment.
6. Slide the multi lock connector (supplied) over the yellow wire from the ignition module. Slide the remaining yellow wire from the wire harness into the connector and snap closed.
7. Slide the multi lock connector (supplied) over the black wire (-) from the battery holder. Slide the remaining black wire from the wire harness into the connector and snap closed.

ACS-1 SWITCH





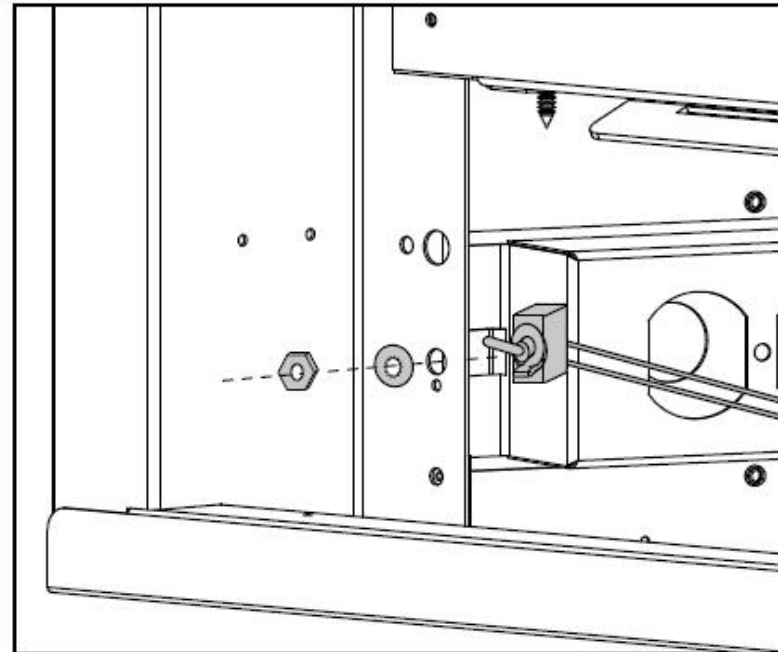
ACS-SIT SIT SYSTEM



ANTI-CONDENSATION SWITCH (ACS-SIT) INSTALLATION INSTRUCTIONS (LHD45)



1. Connect the anti-condensation switch to the wire harness located in the bottom left corner of your appliance. Refer to the "WIRING DIAGRAM" section of your appliance's installation instructions.
2. Remove the nut and lock washer from the anti-condensation switch.
3. Install the anti-condensation switch through the left corner post and secure using the lock washer and nut, as illustrated. Ensure the tab on the switch is fully engaged in the hole.
4. Flip the switch up for standing pilot (anti condensation) or down for intermittent pilot ignition.



Quality System Certified to
ISO
9001-2008
W415-0878 / 02.05.10

LHD45 WITH ACS SWITCH

