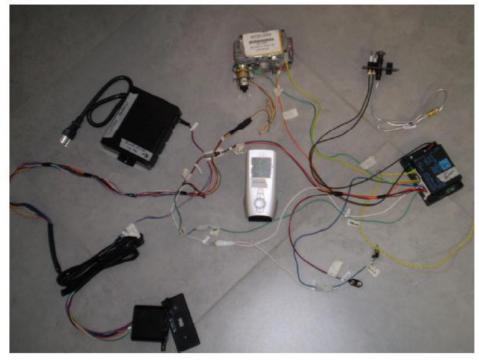
PROFLAME - S.I.T. VALVE with STEPPER MOTOR ELECTRONIC SYSTEM





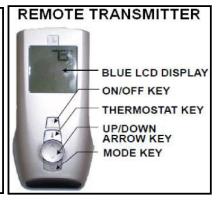




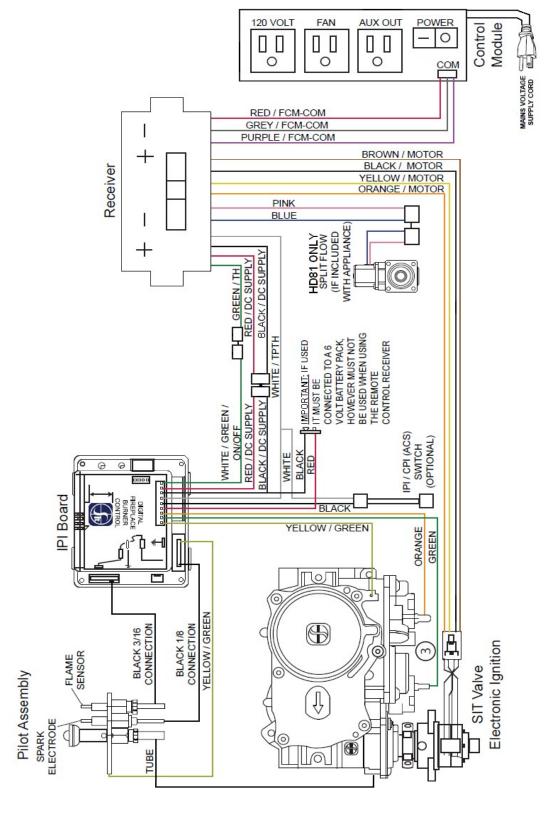






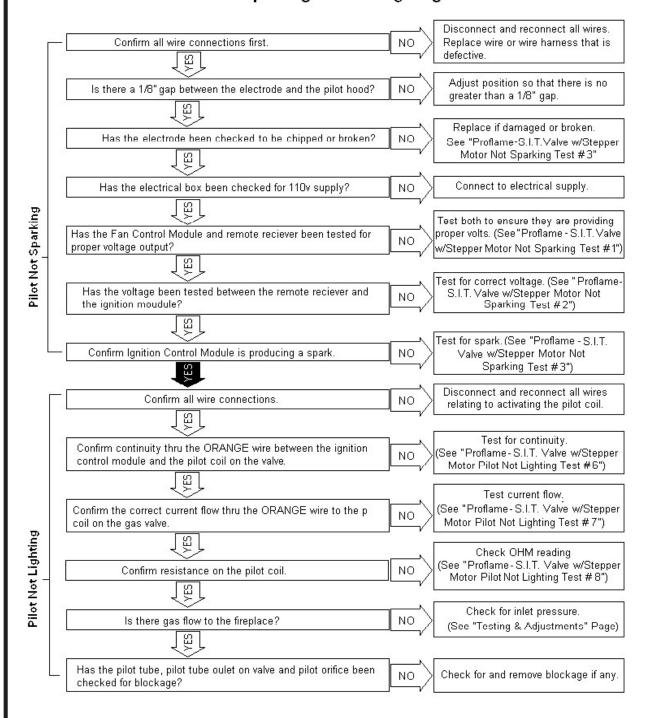


PROFLAME - S.I.T. VALVE with STEPPER MOTOR WIRING DIAGRAM





<u>Troubleshooting: S.I.T. Valve w/Stepper Motor Electronic Ignition Units</u> Pilot Not Sparking And / Or Lighting Flowchart



PROFLAME - S.I.T. VALVE with STEPPER MOTOR ELECTRONIC IGNITION NOT SPARKING DIAGNOSTICS TEST

NOTE: BEFORE STARTING THIS TEST CONFIRM THAT ALL WIRE CONNECTIONS ARE GOOD



TEST #1- Test that there is power being supplied at the 2 main sources.

STEP #1-Confirm there is 110 AC volts at the plug in receptacle on the fireplace. Confirm there is 6.0 to 7.0 DC volts being supplied from the fan control module thru the pins that the thin RED and GREY wire on the connecting wire harness to the remote receiver connect to (A).

If "YES", go to STEP #2.

If "NO", replace fan control module.

STEP #2-Check the other end of the wire harness to ensure that there is 6.0 to 7.0 volts going thru the thin RED and GREY wires (B).

If "YES", go to STEP #4.

If "NO", replace wire harness.



(B)

(D)

STEP #3-Confirm continuity of the thin Red and GREY wires on the Remote receiver wire harness. See picture (C) and (D).

If "YES, confirm wire connections.

If "NO", replace remote receiver wire harness.

STEP #4-Attach wire harness to remote receiver (double check that the wire harness is plugged in securely at both ends), and test the thicker RED and BLACK wire to ensure that you are getting 6.0 to 7.0 volts (E).

If "Yes", go to TEST #2 on the next page.

If "NO", go to STEP #5.



STEP #5 - Confirm the lower 2 left pin connections that match up to the thicker red and black wire from the wire harness plug on the remote receiver is showing between 6.0 to 7.0DC volts. Slide the receiver to the ON position and test as shown in picture (F).

If "YES" go to TEST #2.

If "NO", replace remote receiver.





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PROFLAME - S.I.T. VALVE with STEPPER MOTOR ELECTRONIC IGNITION NOT SPARKING DIAGNOSTICS TEST - continued



TEST #2- Confirm for proper connection at all wire connections between the receiver and the ignition module. Confirm there is 6.0 to 7.0 DC volts power supply from the receiver at both test points as shown in the pictures (A) & (B).

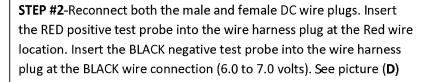
STEP #1- Insert RED positive test probe into the female connector and touch the outside of the connector with the BLACK test probe (6.0 to 7.0 DC volts). See picture (A).

If "YES", go to STEP #2

If "NO", Confirm continuity for both the thicker RED and BLACK wire on the remote receiver wire harness, (see picture (B) for red wire & picture (C) for black wire.

If "YES" to both wires confirm wire harness connection to remote receiver. Go to STEP #2

If "NO" to either wire. Replace wire harness



If "YES", go to TEST #3

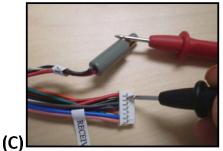
If "NO", go to STEP #3.

STEP #3-Confirm continuity for both the thicker RED and BLACK wire on the ignition control module wire harness. See picture (E) for red wire, and picture (F) for black wire.

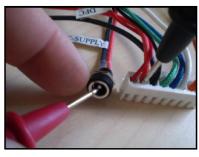
If "YES", go to TEST #6

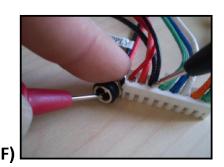
If "NO", replace ignition control wire harness.











(E)

TEST #3 —Confirm that the igniter wire and the grounding wire is securely connected to the ignition module and that the grounding wire is secured to the fireplace. See Picture (A).

If "NO", ensure good connection.

If "YES", go to STEP #1.

STEP #1-Remove igniter wire and hold it about 1/8th inch off the igniter tab (see picture (B)), and activate the fireplace to start ignition.

If "YES", go to STEP #2.

If "NO", replace ignition control module.

FOR LHD50, IR3N, XIR3N, IR3G & XIR4N ONLY

"For HD81 See following page for extended spark testing TEST #4"

STEP #2-Check that ceramic electrode and the pilot hood has a 1/8th inch gap between.

If "YES", replace ceramic electrode.

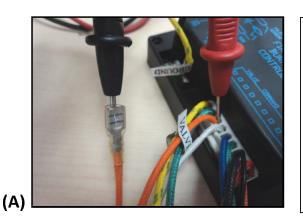
If "NO", adjust gap to 1/8th inch.





(D)

PROFLAME - S.I.T. VALVE with STEPPER MOTOR ELECTRONIC IGNITION PILOT NOT LIGHTING DIAGNOSTICS TEST



TEST #6 – Confirm continuity thru the ORANGE wire from the Ignition control wire harness to the gas valve pilot coil (A).

STEP #1 – Place the RED probe lead into where the orange wire come out of the wire harness connection, and place the BLACK probe lead into the end of the orange wire tab connection.

If "YES" go to STEP #7

If "NO", replace wire harness.



TEST #7 – Confirm the current flow thru the ORANGE wire from the ignition control module to the gas valve pilot coil.

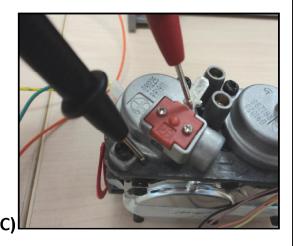
STEP #1 – Set your multi meter to 20 DCA mA. Take the BLACK probe lead connect it to the end of the orange wire from the ignition control module. Take the RED probe lead and hold it against the red pilot coil tab on the gas valve **(B)**.

Activate the unit to start up. Once it starts sparking you should be reading a cycling amperage of 1.50 DCAmA to 19+ DCAmA

NOTE: The standard running current after approximately 30 seconds to a minute of the pilot operating. You should be getting between 1.5 to 2.0 DCA milliamps.

If "NO" – Replace the ignition control module.

If "YES" - go to TEST #8.



TEST #8 – Set your multi meter to 200 OHMS and place the tip of the red meter lead on the red pilot coil tab on the gas valve. Place the tip of the black meter lead to the body of the valve **(C)**. You should be getting between 345 to 349 OHMS.

If "NO", replace gas valve.

If "YES", check inlet pressure test port for gas flow to Valve (see "Testing & Adjustments Section").

If there is gas flow, check for blockage in pilot orifice, pilot tube, and pilot connection port on valve. Remove blockage where found.

If no gas to valve, inspect supply lines and shut off valves.

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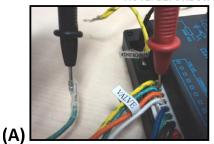
<u>Troubleshooting: S.I.T. Valve w/Stepper Motor Electronic Ignition Units</u> <u>Burner Not Lighting Flowchart</u>

Confirm all wire connections.	ON	Secure / Replace as necessary.
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
Confirm continuity thru the GREEN "TH" wire between the ignition control wire haness and the gas valve.	NO	Check for continuity (See "Proflame Valve Burner Not Lighting TEST #1")
[8]	_ ,	
Confirm current flow thru the GREEN "TH" wire.	NO)	Check for current flow. (See "Proflame Valve Burner Not Lighting TEST #2")
₹Ř		
Confirm resistance on the burner operator coil.	NO)	Check resistance. (See "Proflame Valve Burner Not lighting TEST #3")
[8]		A separate and a separate sepa
Confirm correct gas pressues.	NO >	Check gas pressures. (See "Proflam Valve Burner Not lighting TEST #4")
18 L		
Confirm burner venturi is sitting correctly over burner orfice.	NO	Inspect and confirm. Correct if nessessary.
(N)		AND TO SHEET WAS A SHEET OF THE
Confirm correct air shutter setting on burner venturi.	NO >	Check air shutter setting on burner venturi. Adjust if nessessary.
		Check for blockages in all three
Confirm gas flow thru manifold, burner orifice and burner.	NO	components and remove if any found Note: Fibre burners may have a blockage so by reaming out the hole with a correct sized drill bit will eliminate any blockages found.
] SE [└	
Confirm relief door seal and main door seal.	NO	Inspect to confirm, correct or replace
	/	if nessessary.
Confirm venting is to manufactures specifications.		Inspect to confirm. Correct if nessessary.
[S]	$\overline{}$	incompany.
Confirm vent seals.] NO >	Inspect to confirm. Reseal if nessessary.
(KE)	/	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Confirm that there is no blockage in the venting or fireplace air intake chamber or exhaust collor.	NO	Inspect to confirm. Remove blockage if any.

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PROFLAME - S.I.T. VALVE with STEPPER MOTOR ELECTRONIC IGNITION BURNER NOT LIGHTING DIAGNOSTICS TEST

NOTE: BEFORE STARTING THIS TEST CONFIRM THAT ALL WIRE CONNECTIONS ARE GOOD



TEST #1 – Confirm continuity thru the GREEN wire from the Ignition control wire harness to the gas valve pilot coil (A).

NOTE: Pilot flame must be running in order to perform this test.

STEP #1 – Place the RED probe lead into where the green wire comes out of the wire harness connection, and place the BLACK probe lead into the end of the green wire tab connection.

If "YES" go to TEST #2

If "NO", replace wire harness.

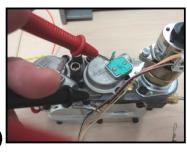


TEST #2 – Confirm the current flow thru the GREEN wire from the ignition control module to the gas valve pilot coil.

STEP #1 — Set your multi meter to DCA mA. Take the BLACK probe lead and contact it to the end of the green wire from ignition control module wire harness. Take the RED probe lead and hold it against the green pilot coil tab on the gas valve **(B)**. Activate the unit to start up. It will take approximately 30 seconds to a minute for the current to stabilize. You should be getting between 1.5 to 2.0 DCA milliamps.

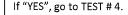
If "NO" - Replace the ignition control module.

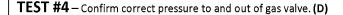
If "YES" - go to TEST #3.



TEST #3 – Set your multi meter to 200 OHMS and place the tip of the red meter lead on the green burner operator coil tab on the gas valve. Place the tip of the black meter lead to the body of the valve **(C)**. You should be getting between 328 to 332 OHMS.

If "NO", replace gas valve.





STEP #1 — Check inlet pressure (IN) should be 7"wc for natural gas and 11"wc to 13"wc for propane.

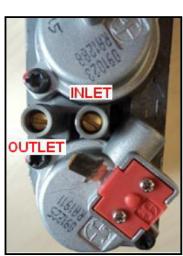
If "NO", check supply lines and meter (NG)/regulator (LP)

If "YES", Go to STEP #2.

STEP #2 – Check outlet pressure (OUT) should be 3.5"wc on high for natural gas and 10"wc for propane.

If "NO", confirm if a conversion was done that it was done correctly. If it was done correctly, then replace gas valve.

If "YES", check for blockage in burner orifice, and manifold tube. Remove blockage where found.



(D)