

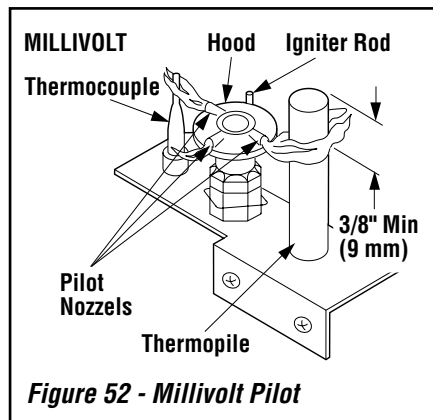
Millivolt Appliance Checkout

The pilot flame should be steady, not lifting or floating. Flame should be blue in color with traces of orange at the outer edge.

The top 3/8" (10 mm) at the pilot generator (thermopile) and the top 1/8" minimum (tip) of the quick drop out thermocouple should be engulfed in the pilot flame.

The flame should project 1" (25 mm) beyond the hood at all three ports (see **Figure 52**). Replace logs if removed for pilot inspection.

To light the burner; turn "ON" the remote wall switch and rotate the gas valve control knob counterclockwise to the "ON" position ("ON" will be at the top side of the valve).



Electronic Appliance Checkout

To light the burner, turn 'ON' the wall or remote control switch. Ensure the igniter lights the pilot. The pilot flame should engulf the flame rod as shown in **Figure 53**.

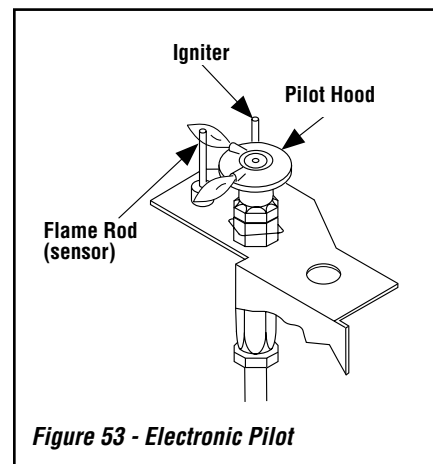


Figure 53 - Electronic Pilot

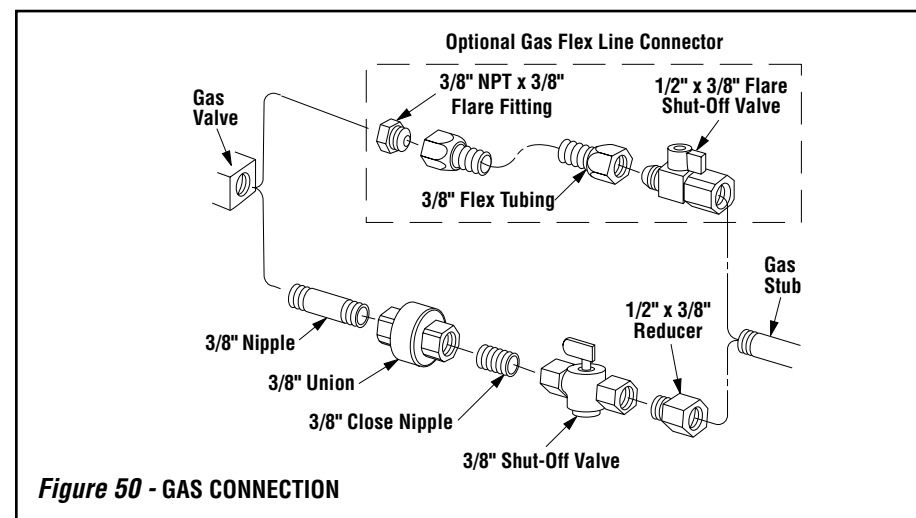


Figure 50 - GAS CONNECTION

TEST ALL CONNECTIONS FOR GAS LEAKS (FACTORY AND FIELD):



WARNING

Never use an open flame to check for leaks.

Turn on gas supply and test for gas leaks, using a gas leak test solution (also referred to as bubble leak solution).

NOTE: Using a soapy water solution is an effective leak test solution but it is not recommended, because the soap residue that is left on the pipes/fittings can result in corrosion over time.

- Light the appliance (refer to the lighting instructions label in the control compartment or in the Care and Operation Instructions manual).
- Brush all joints and connections with the gas leak test solution to check for leaks. If bubbles are formed, or gas odor is detected, turn the gas control knob (off/pilot/on) to the "OFF" position. Either tighten or refasten the leaking connection, then retest as described above.
- When the gas lines are tested and leak free, be sure to rinse off the leak testing solution.

Step 8. VERIFYING APPLIANCE OPERATION

With gas line installed run initial system checkout before closing up the front of the unit. Follow the pilot lighting instructions provided in the Care and Operation Instructions manual. For piezo igniter location see **Figure 51** (millivolt appliances only).

NOTE: Lighting Instructions are also found on the literature tag tied to the gas piping next to the gas valve. To access the tag, open the lower control compartment door (**Figure 51**) by pushing in simultaneously the left and right top corners of the door. (The door is hinged at the bottom). Remove the bottom compartment door by sliding the hinge pin, located at the door's left side, to the right until it disengages from the left corner post hole.

When first lighting the appliance, it will take a few minutes for the line to purge itself of air. Once purging is complete, the pilot and burner will light and operate as indicated in the instruction manual.

Subsequent lighting of the appliance will not require such purging. Inspect the pilot flame (remove logs, if necessary, handling carefully).

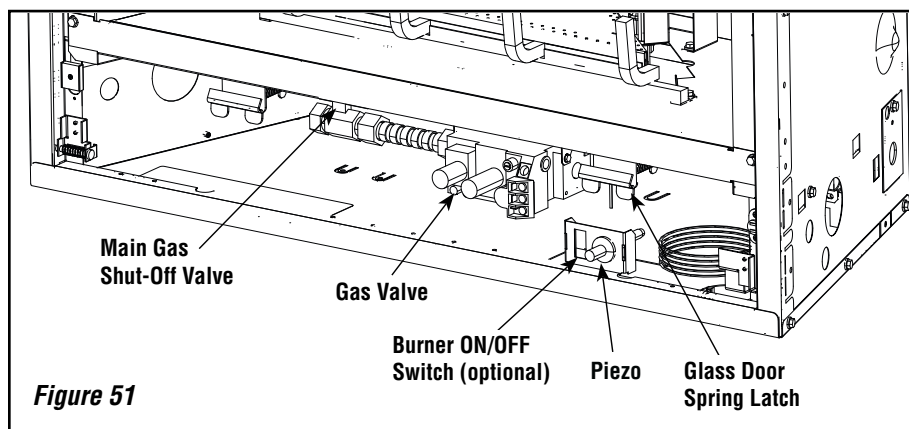


Figure 51

Burner Flame Adjustments

WARNING

- Air shutter adjustment should only be performed by a qualified professional service technician.
- Ensure front glass panel are in place and sealed during adjustment.

CAUTION

- Soot will be produced if the air shutter is closed too much. Any damage due to sooting, resulting from improperly setting the air shutter, is not covered under the warranty.
- The air shutter door and nearby appliance surfaces are hot. Exercise caution to avoid injury while adjusting flame appearance.

1. Refer to **Figures 74 and 75** for proper flame appearance. To adjust the flame, rotate the adjustment rod toward the back or toward the front of the fireplace (rod located in the lower control area). Position the air shutter to the factory setting as shown in the table in **Figure 76**.
2. Light appliance (follow lighting procedure on lighting label in control compartment or see the **Pages 55 through 58**).
3. Allow the burner to operate for at least 15 minutes while observing the flame continuously to ensure that the proper flame appearance has been achieved. If the following conditions are present, adjust accordingly.
 - If flame appears weak or sooty, adjust the air shutter, incrementally, to a more open position until the proper flame appearance is achieved.
 - If flame remains blue, adjust the air shutter, incrementally, to a more closed position until the proper flame appearance is achieved.
4. Leave the control knob (off/pilot/on) in the ON position and the burner OFF/ON switch OFF (and remote switches, if applicable).
5. When satisfied that the burner flame appearance is normal, re-install the lower control compartment door then proceed to finish the installation.

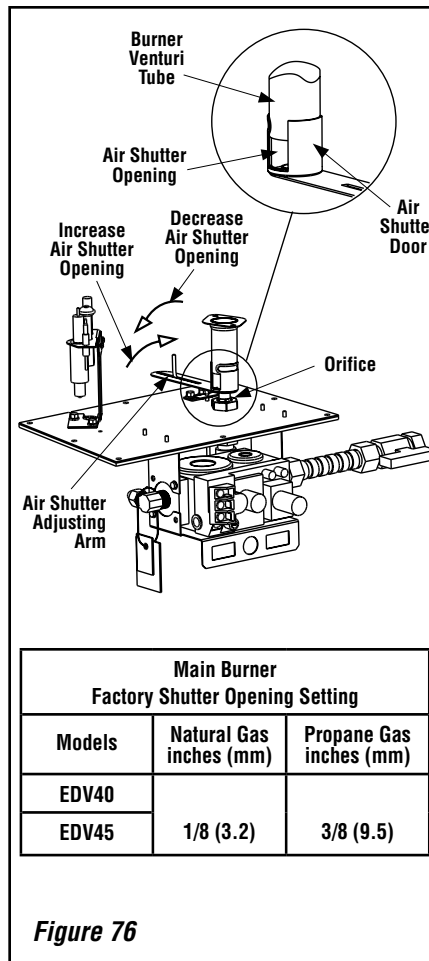


Figure 76

Millivolt Appliance Checkout

The pilot flame should be steady, not lifting or floating. Flame should be blue in color with traces of orange at the outer edge.

The top 3/8" (10 mm) at the pilot generator (thermopile) and the top 1/8" minimum (tip) of the quick drop out thermocouple should be engulfed in the pilot flame.

The flame should project 1" (25 mm) beyond the hood at all three ports (see **Figure 77**). Replace logs if removed for pilot inspection.

To light the burner; turn "ON" the remote wall switch and rotate the gas valve control knob counterclockwise to the "ON" position ("ON" will be at the top side of the valve).

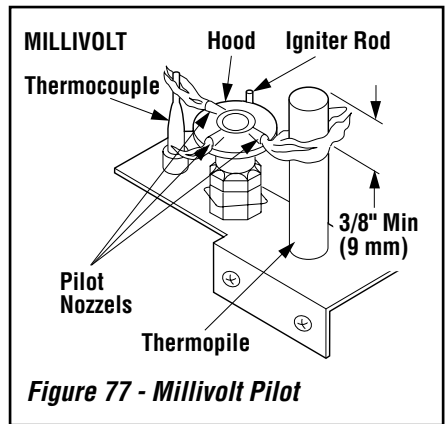


Figure 77 - Millivolt Pilot

Electronic Appliance Checkout

To light the burner, turn 'ON' the wall or remote control switch. Ensure the igniter lights the pilot. The pilot flame should engulf the flame rod as shown in **Figure 78**.

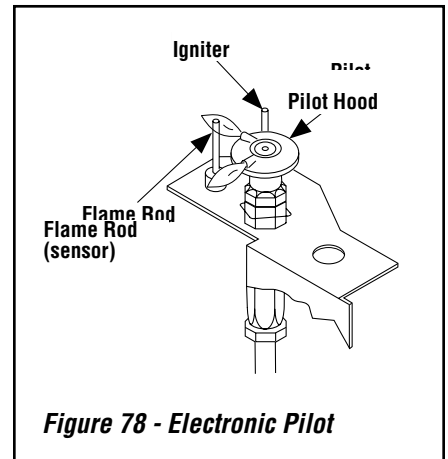


Figure 78 - Electronic Pilot

TROUBLESHOOTING - MILLIVOLT GAS CONTROL SYSTEM

NOTE: Before troubleshooting the gas control system, Ensure external gas shut off valve, located at gas supply inlet, (and wall switch, if applicable), is in the "ON" position.

IMPORTANT: Valve system troubleshooting should only be accomplished by a qualified service technician.

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Spark igniter will not light pilot after repeated triggering of igniter button. WARNING: if the pilot will not light after 1 minute of attempting, wait for at least 5 minutes for gas to clear before attempting again.	A. Defective igniter (no spark at electrode).	Check for spark at electrode and pilot; if no spark and electrode wire is properly connected, replace igniter.
	B. Defective or misaligned electrode at pilot (spark at electrode).	Using a match, light pilot. If pilot lights, turn off pilot and trigger the igniter button again. If pilot lights, an improper gas mixture caused the bad lighting and a longer purge period is recommended. If pilot will not light - check gap at electrode and pilot - should be 1/8" to have a strong spark. If gap measures 1/8", replace pilot (see Figure 77 on Page 49).
	C. Gas supply pressure errant.	Check inlet gas pressure. It should be within the limits as marked on the rating plate.
	D. Pilot orifice plugged.	Clean or replace pilot orifice.
2. Pilot will not stay lit after carefully following the lighting instructions.	A. Defective pilot generator (thermocouple).	Check pilot flame, it must impinge on thermocouple (see Figure 77 on Page 49). Clean and/or adjust pilot for maximum flame impingement on thermocouple. Ensure that the connection between the valve and thermocouple are tight and secure.
3. Pilot burning, no gas to burner, Valve knob "ON," and the (standard) burner OFF/ON switch is "ON." Read important note below. IMPORTANT NOTE: If an optional *remote switch is used for burner operation, if the standard burner OFF/ON switch is still installed on appliance it must be in the "OFF" position. * Optional remote switch kits - wall switch, thermostat or timer, or remote control.	A. Wall switch or wires defective.	Check wall switch and wires for proper connections. Jumper wire across terminals at wall switch, if burner comes on, replace defective wall switch. If okay, jumper wires across wall switch wires at valve, if burner comes on, wires are faulty or connections are bad.
	B. Thermopile may not be generating sufficient millivolts.	Check thermopile with millivolt meter. Take reading at thermopile terminals of gas valve. Should read 325 millivolts minimum with optional wall switch "OFF." Replace faulty thermopile if reading is below specified minimum.
	C. Plugged burner orifice.	Check burner orifice for blockage and remove.
	D. OFF/ON Switch & *Remote Switch are in the "ON" position resulting in excessive resistance.	When turning on the burner using a *remote switch, ensure that the standard OFF/ON switch is in the "OFF" position. If both switches are in the ON position, it may result in excessive resistance (& millivolt drainage) and the burner may not come on.
4. Frequent pilot/burner outage problem.	A. Pilot flame may be too low or blowing (high) causing the pilot/valve safety to drop out.	Clean and/or adjust pilot flame for maximum flame impingement on thermocouple (see Figure 77 on Page 49).

REPLACEMENT PARTS LIST

Item No.	Description	40" MODELS		45" MODELS	
		Part No.	Qty.	Part No.	Qty.
1	Hood	97K52	1	97K53	1
4	Enclosure, Glass Front (Complete)	H8122	1	H6225	1
6	Door Latch Spring	H1264	2	H1264	2
7	Nameplate (Brand)	12L15	1	12L15	1
8	Barrier	J7420	1	J7428	1
9	Front Face Assembly with Barrier	J7530	1	J7532	1
10	Log Set (Complete)	55M03	1	55M03	1
11	Burner Assembly	H3044	1	H3044	1
12	Grate Assembly	H6605	1	H6605	1
13	Venturi/Air Shutter	H6321	1	H6321	1
14	Orifice, Main Burner - Nat. Gas	69L96	1	24M10	1
14	Orifice, Main Burner - LP Gas	39L10	1	21L01	1
16	Bag of Glowing Embers (rockwool)	88L53	1	88L53	1
19	Gasket - Venturi Tube Mounting	43K85	1	43K85	1
20	Gas Line Flexible Connector	93L32	1	93L32	1

Gas Controls - SIT Millivolt					
Item No.	Description	Natural Gas		Propane Gas	
		Part No.	Qty.	Part No.	Qty.
30	Gas Valve, SIT	H6209	1	88J53	1
31	Piezo Igniter	10K86	1	10K86	1
32	Pilot Assembly	69L17	1	69L18	1
33	Pilot Generator	60J79	1	60J79	1
34	Thermocouple	74L57	1	74L57	1
35	Pilot Tube	74L56	1	74L56	1
36	Electrode And Cable	H6212	1	H6212	1

Gas Controls - SIT Electronic					
Item No.	Description	Natural Gas		Propane Gas	
		Part No.	Qty.	Part No.	Qty.
40	Gas Valve, SIT	H8844	1	H8594	1
41	Pilot Assembly	H7268	1	H7269	1
42	Transformer	H8006	1	H8006	1
---	Pilot Shield	H3737	1	H3737	1
43	Digital Flame Control Module	H7272	1	H7272	1
---	Battery Holder	H8803	1	H8803	1
---	DFC Wiring Harness	H8601	1	H8601	1
17	CPI On/Off Switch	27K30	1	27K30	1

WARNING

Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

AVERTISSEMENT

Risque de dommages ou de blessures si les pièces ne sont pas installées conformément à ces schémas et ou si des pièces autres que celles spécifiquement approuvées avec cet appareil sont utilisées.

Contact an Innovative Hearth Products dealer to obtain any of these parts. Never use substitute materials. Use of non-approved parts can result in poor performance and safety hazards.