

# MMVK-PQM **IMPORTANT**

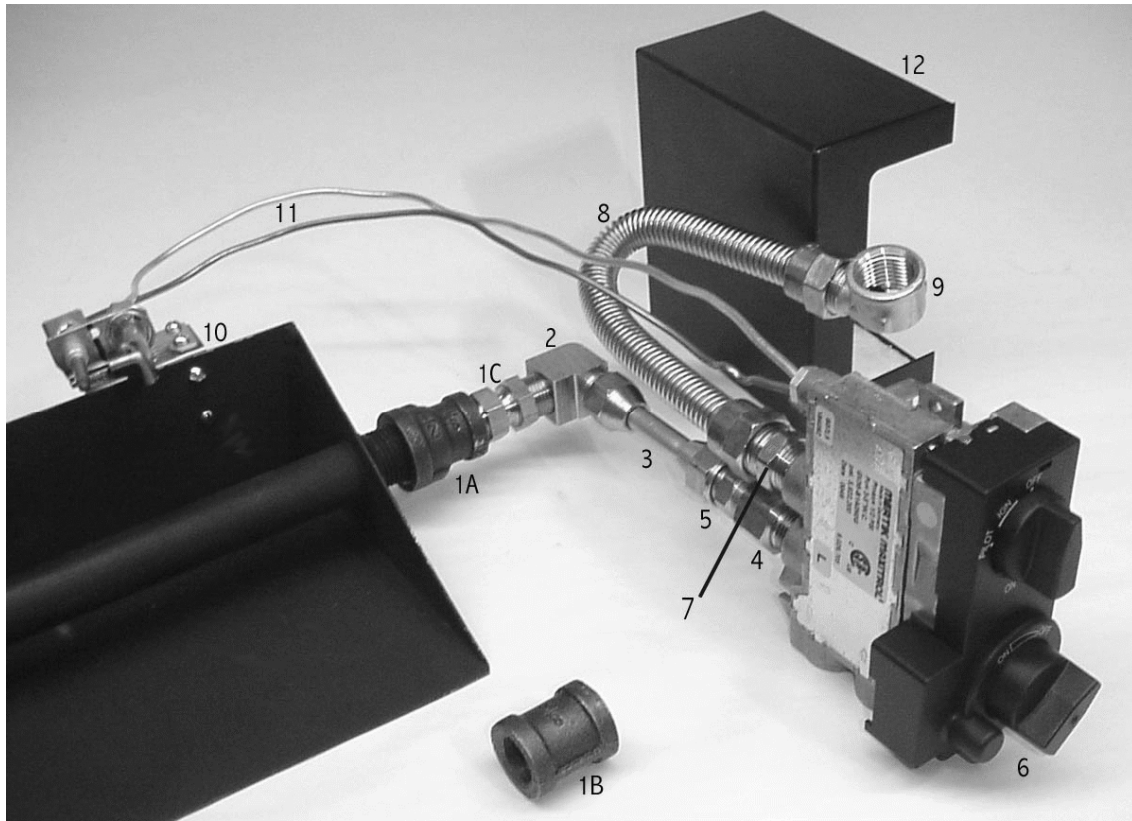
## **READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE INSTALLING**

These instructions must be used as a supplement to the instructions supplied with your gas log set. Follow the Gas Log Set instructions and make appropriate adjustments for addition of safety pilot kit. Gas supply must be 2" minimum I.D. and with appropriate pressure.

### General Instructions

We recommend that our products be installed and serviced by professionals who are certified in the U.S. by NFI (National Fireplace Institute) or in Canada by WETT (Wood Energy Technical Training). **Installer must follow all instructions carefully to ensure proper performance and safety**

- Installer: Please leave these instructions with consumer.  
Consumer: Please retain these instructions for future use.



### MMVK-PQM PARTS LIST

1A	505	1/2 x 3/8 Coupler	7	411	U1-8C 1/2 x 3/8
1B	509	3/8 x 3/8 Coupler	8	229	20-9898-10 Flex Connector
1C	460	Air Mixer/Orifice	9	407	E3-8D 1/2 x 1/2
2	405	E3-6C 3/8 x 3/8 Female Elbow	10	120	PBMB Pilot Burner MB
3	426	3/8 x 3/8 Swivel Connector	11	102P	Pilot Burner Assembly
4	441	120A-CC 3/8 x 3/8 Adaptor	12	233/234	Heat Shield & Insulation
5	410	U1-6C 3/8 x 3/8 Male Connector	13	667	Parts Bag
6	239	G34-BIAOLOG Valve	14	615-1	Vermiculite (not shown)

### ASSEMBLY INSTRUCTIONS

FOR BEST RESULTS WITH THIS KIT. THE BURNER PAN SHOULD BE FASTENED TO FIREPLACE FLOOR. CLEAN FLOOR OF FIREPLACE THOROUGHLY AND USE A CIRCLE OF HI TEMP SILICONE (1 2" OR SO) UNDER EACH END OF BURNER PAN.

THIS KIT MAY BE INSTALLED EITHER STANDING UP (VERTICAL) OR LAYING DOWN (HORIZONTAL) AND MAY BE INSTALLED ON EITHER SIDE OF THE FIREPLACE. THESE INSTRUCTIONS ARE WRITTEN FOR RIGHT SIDE, SO MINOR ASSEMBLY ADJUSTMENTS MUST BE MADE FOR LEFT SIDE INSTALLATIONS.

**NOTE 1:** It is easiest to assemble entire burner pan and valve outside the fireplace.

**FOR A QUICK MOUNT@ INSTALLATIONS**  
**WITH VALVE IN VERTICAL POSITION**

Step 1) Based on the kind of threads on your burner pan, select Part 1A for 1/2" external, 1B for 3/8" external or 1C for 3/8" internal.

Step 2) Install whichever fitting you have selected, on threaded end of burner tube.

**NOTE 2: WHEN YOU INSTALL PART 1C BE SURE TO LEAVE LONG END WITH NUT ON IT POINTED BACK TOWARD VALVE AND AWAY FROM BURNER PAN.**

Step 3) If you installed 1A or 1B, install Part 1C to it. If you installed 1C, install Part 2 to that. Leave flare end of Part 2 pointing forward.

Step 4) With valve (6) positioned as in the illustration on Page 1, locate arrows on left side of it that mark the inlet and outlet ports.

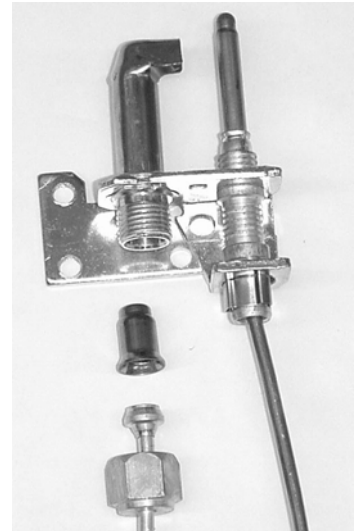
**FOR A QUICK MOUNT@ INSTALLATIONS**  
**WITH VALVE IN HORIZONTAL POSITION**

Step 1) Select one part from parts 1A, 1B or 1C.  
Part 1A if your burner tube has 1/2" External Threads.  
Part 1B if your burner tube has 3/8" External Threads.  
Part 1C if your burner tube has 3/8" Internal Threads.

Step 2) Install part you have selected in Step 1) on burner tube.  
2A If you installed part 1A, follow it by installing part 1C.  
2B If you installed part 1B, follow it by installing parts 1C .  
2C If you installed part 1C, follow it by installing part 2.

Step 3) With valve in horizontal position and knobs facing you, be sure the large on/off knob is on your left and the smaller ignition control knob is on your right.

Step 4) Locate the arrows on top rear of valve (6) that show you the inlet port (on your right) and outlet port (on your left).



**NOW FOLLOW STEPS 5 THROUGH 20**

Step 5) Install pipe thread end of Part 7 into inlet port.

Step 6) Install pipe thread end of Part 4 into outlet port and the pipe thread end of Part 5 into female end of Part 4.

Step 7) Install Part 3 to male flare ends of Parts 2 & 5.

**Note 3:** To adjust for different burner pans with burner tube higher or lower it may be necessary to bend Part #3 and change the direction the male flare end of Part #2 is pointing. To bend Part 3. Hold valve firmly and carefully bend Part 3 to where Part 2 can be rotated to correctly meet Part 3 and valve is standing up straight or laying down flat. Be careful not to crimp or break tubing in Part 3.

Step 8) Using 2 small nuts and bolts from parts bag assemble #11 pilot burner/thermocouple to Part 10 as illustrated.

Step 9) Install this assembly on back or end of burner pan where holes are provided. Use other 2 small nuts & bolts.

Step 10) Being very careful and keeping it away from the main burner, bring copper lead from the thermocouple around to back of valve and screw it into port just above inlet port of valve, **FINGER TIGHT PLUS 1/8 TURN**. Then, being very careful not to break or crimp bring small aluminum tubing around, keeping it away from main burner flame, and install in port just above the thermocouple lead port.

**NOW IS THE TIME TO PUT COMPLETE ASSEMBLY INTO FIREPLACE**

Step 11) Attach Part 9 to incoming gas pipe.

Step 12) Attach ends of Part 8 to male flare ends of Parts 7 & 9.

Step 13) Make sure all connections are tight.

Step 14) Turn on gas to valve.

Step 15) Bleed air from lines leading to valve and pilot. This may take several minutes.

Step 16) Light pilot by pushing control in slightly and turning to the Pilot@ position. Push knob all the way in and every 10 seconds apply flame to the pilot burner. (Pilot burner will not light until all air is bled from lines). After pilot lights hold knob in for 30 to 60 seconds until it will stay lit when you release knob. If your kit is spark igniter equipped, light pilot by first pushing control knob in slightly and setting to the AIGN@ position. Push knob in as far as you can, then turn to Pilot@ position. This will cause spark to jump from electrode to the front, top edge of pilot burner hood across the 1/6" gap shown in figure 1.

Step 17) When pilot lights turn control knob from Pilot@ to Aon@. Main burner should light.

**Note 4: NOW IS THE TIME TO TEST FOR LEAKS. USE SOAPY WATER AT EVERY CONNECTING POINT IN GAS SYSTEM. IF LEAKS ARE FOUND, TURN OFF GAS, REPAIR LEAKS, RE-LIGHT AND TEST AGAIN.**

**DO NOT LEAVE SET BURNING UNTIL ALL LEAKS ARE ELIMINATED**

Step 18) Slide Part 12 Heat Shield over valve to protect it from flame.

Step 19) Turn burner off, then install vermiculite, sand or cinders from your log set in burner pan to cover burner tube. Finish log set assembly per instructions with your set.

If, during operation, your set shuts down, it is probably due to overheating of the thermocouple. Here are some things to do:

- 1) Make sure pilot burner assembly and pilot burner mounting bracket are assembled and mounted so pilot burner is as far as possible away from the first flame hole in the burner tube. If you were able to move the pilot burner as much as an inch this may be enough.
- 2) Be sure back logs are not directly over thermocouple. They could be reflecting too much heat onto thermocouple.
- 3) Be sure material in burner pan is not so deep it crowds the pilot burner assembly.
- 4) Be sure your glass doors are open.

If you still have shutdown:

- 1) Bend flat top of pilot burner mounting bracket downward so pilot burner assembly becomes more vertical than horizontal. Try this in steps until you reach a position that works. If you get to a completely vertical position and still have shutdown;
- 2) Drill 2 new holes in burner pan 2" to 1" further from the flame port in the burner pan. Remount pilot burner assembly. Note: With Delta or Hargrove sets, it is suggested to mount the Pilot Burner assembly vertically without the bracket.

**Note 5: THERE IS AN INTERLOCK SAFETY DEVICE BUILT INTO THE MAXITROL VALVE THAT WILL NOT PERMIT THE ON/OFF CONTROL KNOB TO BE TURNED TO ON WHILE THE THERMOCOUPLE IS STILL HOT.**

**MAXITROL**  
**Millivolt Pilot Valve Kit**  
**Trouble Shooting**

IT IS EXTREMELY RARE FOR A THERMOCOUPLE OR VALVE TO FAIL DUE TO DEFECT.  
 SEE BELOW BEFORE REMOVING EITHER FROM THE FIREPLACE.

<u>Symptoms</u>	<u>Possible Cause</u>	<u>Solution</u>
Pilot won=t light.	1) Gas line not bled to let gas reach pilot. 2) Pilot adjustment screw not open far enough. 3) Gas not reaching pilot because valve is installed backwards. 4) Pilot gas supply tube burned or crimped. 5) Knob on valve not being in far enough. 6) Pipe dope or tape used on thermocouple connections. 7) Soot or rust covering outlet hole on pilot orifice.	1) Bleed lines. 2) Open pilot adjustment screw. (Turn to Left). 3) Re-install Valve. 4) Replace pilot burner assembly. Route away from main burner flame. 5) Push in about 1/4". 6) Remove pipe dope or tape. 7) Clean thoroughly and open hole with pin.
Pilot won=t stay lit	1) Thermocouple is not hot enough. 2) Thermocouple lead too tight or not tight enough at valve.	1) Make sure pilot flame is strong and is hitting thermocouple. 1a) Make sure thermocouple is paint, carbon & rust free. 1b) Hold knob on valve in longer. 2) Adjust to finger tight + 1/4 turn.
Pilot lights but burner won=>t.	1) Gas not getting to burner. Valve control not set to ON position. 2) Valve/Receiver not wired correctly. 3) Gas not getting to burner due to debris in line.	1) Turn control knob to ΔON@ position. 2) Rewire. 3) Disassemble and clean line.
Pilot lights, burner lights, but system goes out after a while.	1) Thermocouple over heating.	1) Consult Instructions
Flames come out of holes on air/mixer orifice	1) Air mixer/orifice installed incorrectly.	1) Install air mixer/orifice of holes so long end and air holes face toward valve (away from main burner).
Whistling Sound	1) Seldom caused by pilot. 2) Possibly a too small flex connector.	1) Check log set burner, orifice (if used) and amount of material covering burner. 2) Use minimum 2" OD connector.
Soot on Logs	1) Rarely caused by pilot.	1) Check for flame impingement on logs. 2) Adjust air mixer if using LP.

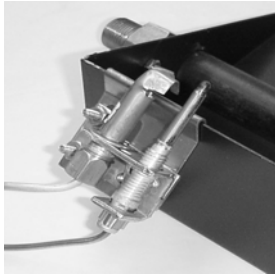


Fig 1

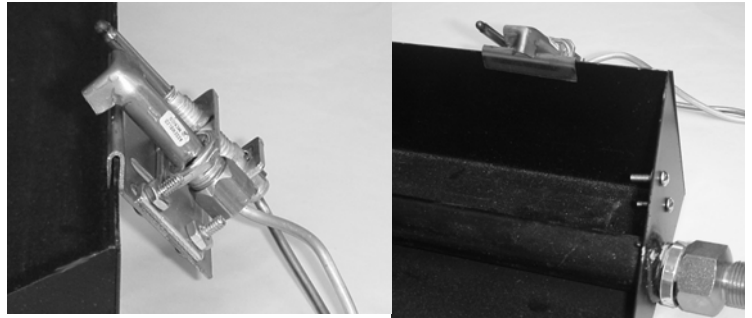


Fig 3

## New Pilot Mounting Bracket Instructions

Our new pilot-mounting bracket allows easier and faster installation of any of our pilot assemblies. It also allows installer to conveniently move the pilot in any overheat situation without having to drill new holes in the burner pan.

### Step 1

Assemble pilot to mounting bracket with two screws and nuts supplied in the parts bag (as shown in Fig 1). The bracket is slotted allowing you to adjust the pilot up and down. We recommend that the flame just clear the top of the burner pan

### Step 2

Take remaining two screws and nuts and put them in the holes (if any) that are there to mount the bracket to. This will prevent any flames coming through the holes and burning the pilot tube.

## Caution

GLASS DOORS AND DAMPER MUST REMAIN OPENED DURING OPERATION  
 THE CONTROL KNOB MAY BECOME HOT AND CAN BE REMOVED AS NEEDED (SOME VALVES CANNOT)  
 PILOT CAN GO OUT DUE TO DOWNDRAFTS AND/OR FLUCTUATING GAS PRESSURES.  
 NEVER THROW COMBUSTIBLE MATERIALS ONTO GAS LOGS. (IE, PAPER, PINE PONES, TRASH, FOOD, CIGARETTES ETC)

## Pilot Lighting Instructions

1. **Caution** – Doors must be left open during operation of gas logs. Operating gas logs with doors closed will overheat control and void warranty
2. Fireplace damper must be fully opened with damper clamp in place during operation.
3. Be sure gas supply to the fireplace is on.
4. Before lighting pilot remove all the logs from the grate carefully and set them on a piece of newspaper or towel. **Please note the logs will be very dirty it is best to use glove when handling the logs.**
5. Turn the gas control knob to the pilot position (pilot marker on control knob pointing to 12:00 or upward position).
6. Push in on the control knob. The knob should depress approximately ½ inch, this will release a small amount of gas to the thermocouple and pilot lighting area. See pictures above
7. While continuing to depress the control knob, light a match or lighter and put it into the thermocouple and pilot lighting area. A small blue flame should appear.
8. Continue to depress the control knob for 45 seconds to 1 minute while the pilot flame is lit.
9. When the gas control knob is released, the pilot flame should continue to burn ( if the pilot goes out repeat the above steps).
10. Rotate the gas control knob from “pilot” to the “on” position approximately ¼ turn counterclockwise (Refer to control knob and valve for exact location) to supply full flow to main burner.