



Valve Systems:

MVQMKN
MVQMKLP

Optional:

GCRK
GCWS

**INSTALLATION AND OPERATIONS GUIDE FOR GRAND CANYON GAS MILLIVOLT VALVE
GRAND CANYON GAS LOGS USES ROBERTSHAW 710 SERIES GAS HEATING CONTROLS**

**Installation and service must be provided by a qualified installer, service agency or
gas supplier**



CAUTION

THIS DEVICE SHOULD BE INSTALLED BY A QUALIFIED SERVICE TECHNICIAN WITH DUE REGARD FOR SAFETY AS IMPROPER INSTALLATION COULD RESULT IN A HAZARDOUS CONDITION.



We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

CAUTIONS

1. This valve system **MUST** be installed by a certified and trained gas professional
2. Turn off gas supply before installing valve.
3. All piping **MUST** meet applicable local codes and ordinances and the national fuel gas codes (ANSI Z223.1/NFPA NO.50)
4. ALL wiring **MUST** meet applicable electrical codes and ordinances.
5. Check out the complete system after installing the valve.
6. Prior to installation, verify conformance with burner installation instructions.

FOR YOUR SAFETY

IF YOU SMELL GAS:

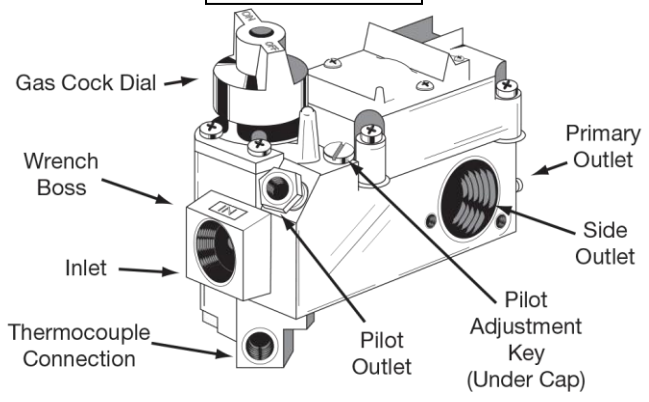
1. **OPEN ALL WINDOWS**
2. **DO NOT TOUCH ELECTRICAL SWITCHES**
3. **EXTINGUISH ALL OPEN FLAMES**
4. **IMMEDIATELY CALL YOUR GAS SUPPLIER**

INSTALLER: Leave this manual with the log set
CONSUMER: Retain this manual for future reference.

PARTS LIST



Valve Diagram



- MVQMNK / MVQMKLP PARTS LIST**
1. 710-502 (Millivolt Valve)
 2. 113/107 (Thermopile Pilot Hood)
 3. 426 (3/8 x 3/8 Swivel Connector)
 4. 48-66 (3/8 x 3/8 Straight)
 5. 49-66 (3/8 x 3/8 90*)
 6. Heatshield-710 (Heatshield)
 7. 1751-016 (710 LP Conversion Kit)*
 8. VEM-8 (Vermiculite)*
 9. 218P (Pilot LP Orifice NOT SHOWN)*
 10. Black Plugs (NOT SHOWN)
- *LP ONLY

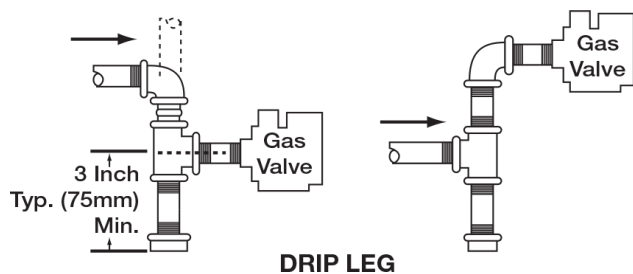
WARNING: Installer MUST follow gas flow on the valve. If not valve may not shut off gas.

INSTALLATION INSTRUCTIONS

Turn off gas supply and electrical power to equipment before servicing.

PIPING

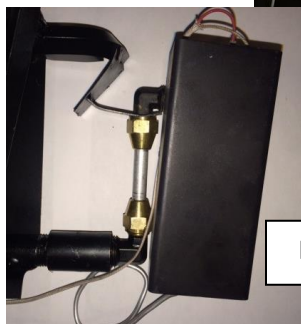
1. Check replacement valve for multiple outlets (side outlets). If it has them, be sure all unused outlets are plugged using the socket plugs provided.
2. Pipe or tubing must be clean and free of scale and dirt.
3. Make sure gas piping is pressure tested before control is connected. High pressure can damage control causing a hazardous condition. Do not subject control to more than 1/2 PSI, (14" W.C.) inlet pressure.
4. If it is not already installed, a drip leg (sediment trap) must be added to the gas supply line to control. (See figure below.) All piping must comply with local codes and ordinances and with National Fuel Gas Code (ANSI Z223. 1/NFPA, No. 54).
5. Using pipe thread compound or tape (suitable for gas), apply a small amount on the male pipe threads. Leave the first two threads clean. Never use compound on female threads as it might be pushed into the control body.
6. The gas valve is multiposition and can be mounted in any position (except upside down) without affecting its operation.
7. Install gas valve so gas flow conforms with the inlet and outlet of the control.
8. **DO NOT** insert any object other than suitable pipe or tubing in the inlet or outlet of this control. Internal damage may occur and result in a hazardous condition. A backup wrench should only be used on the wrench boss provided for this purpose, never on the body of the control, as this could distort the casting. **NOTE:** Do not overtighten any pipe connections, as this could crack the valve body. A valve with a cracked valve body will not be warrantied.



PILOT PLACEMENT



REAR OF BURNER



HEATSHIELD PLACEMENT

WIRING DIAGRAM

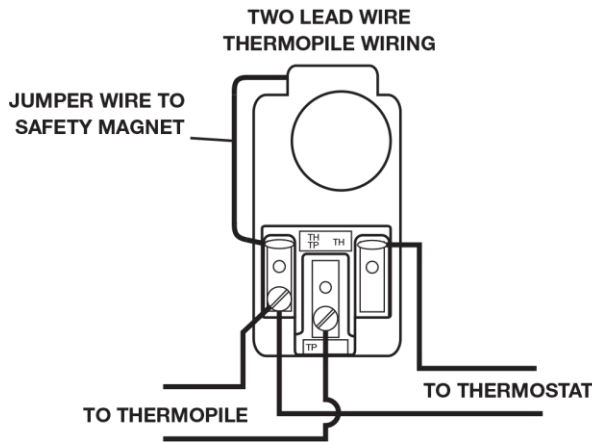
Millivolt Models

Most appliances manufactured in the USA and Canada are manufacture to meet the standards set forth by the American National Standards Institute (ANSI). A recent revision in the standards “miswiring requirements for gas valves” was effective January 1, 1996. The reason for this standard was so that you as a service technician could disconnect the gas valve wires and reconnect them without making a mistake. Therefore all Robertshaw millivolt gas valves now new standard. The 710-500 series millivolt gas valves now have a 1/4” quick connect terminal and a 3/16” quick connect terminal on the terminal block. There is NO terminal screw (or threads) on the side that has the 3/16” terminal. If your old application used a terminal screw, you will need to use a 3/16” adaptor terminal.

The 710-500 Series millivolt valves are designed to operate with 1950 Series two-lead thermopiles only. These valves will also operate with any competitive (two-lead) thermopiles having outputs of 250 MV to 750 MV.

For best operation of a Millivolt system, the lead wires from the valve to the wall thermostat should not exceed the recommended maximum length shown below:

Wire Size	Wire Length	Wire Size	Wire Length
14 GA.	100 FT.	20 GA.	25 FT.
16 GA.	64 FT.	22 GA.	16 FT.
18 GA.	40 FT.		



OPTIONAL - GCRK



OPTIONAL - GCWS



FOR YOUR SAFETY READ BEFORE LIGHTING

“WARNING – If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.”

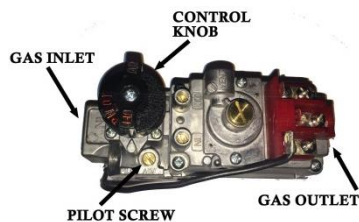
- A.** This appliance has a pilot which must be lighted by hand.
- B. BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

1. Do not try to light any appliance.
 2. Do not touch any electric switch; do not use any phone in your building
 3. Immediately call your gas supplier from a neighbor’s phone. Follow the gas supplier’s instructions.
 4. If you cannot reach your gas supplier, call the fire department.
- 5.** Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don’t try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion
- 6.** Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control, which has been underwater.

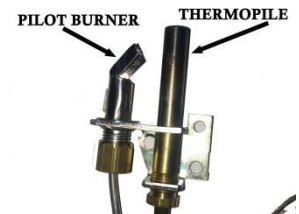
LIGHTING INSTRUCTIONS FOR MILLIVOLT VALVE

1. STOP! Read the safety information above on this label.
2. Push in gas control knob slightly and turn clockwise to “OFF”



NOTE: Knob cannot be turned from ‘PILOT’ to ‘OFF’ unless knob is pushed in slightly. Do not force

3. Wait five (5) minutes to clear out any gas. If you smell gas, STOP! Follow “B” in the safety information above. If you don’t smell gas, go to next step.
- 4.** Find pilot – follow metal tube from the gas control behind the burner.
- 5.** Turn knob on gas control-clockwise to “PILOT”
- 6.** Push in control knob all the way and hold in. immediately light the pilot with a match. Continue to hold the control knob in for about one minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 3-7
- If knob does not pop up when released, stop and immediately call your service technician or gas supplier
 - If the pilot will not stay lit after several tries, turn the gas control knob to “OFF” and call your service technician or gas supplier
- 7.** Turn gas control knob counterclockwise to “ON”.



TO TURN OFF GAS TO APPLIANCE

1. Turn knob clockwise from “ON” position to the “PILOT” position. Push in the gas control knob slightly and turn clockwise to “OFF”. Do not force knob.