Millivolt Valve System

LOST RIVER PRODUCTS

INSTALLATION & OPERATIONS GUIDE

Robertshaw 710 Series
Gas Heating Controls

VALVE SYSTEM

MV (Millivolt)

PROFESSIONAL INSTALLATION REQUIRED

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

IMPORTANT SAFETY PRECAUTIONS

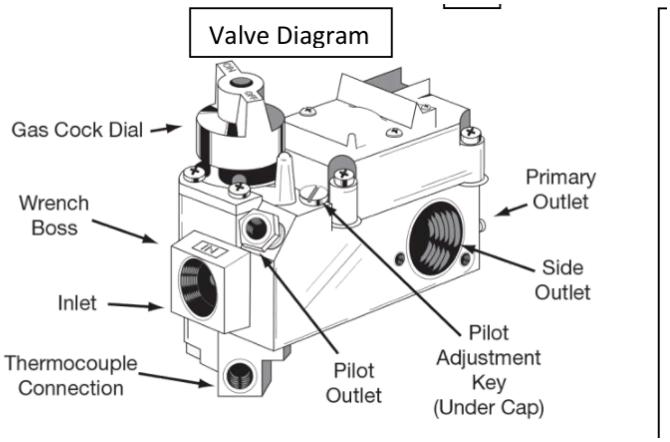
1. This valve system **MUST** be installed by a certified and trained gas professional.
2. Turn off the gas supply before installing the valve.
3. All piping **MUST** comply with applicable local codes and fuel gas codes.
4. All wiring **MUST** meet applicable electrical codes and ordinances.
5. Check the complete system after installing the valve.
6. Before installation, verify conformance with burner installation instructions.

IF YOU SMELL GAS: Do not operate electrical switches or use flames. Leave the area and contact your gas supplier from a safe location. If you cannot reach them, call the fire department.

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

Valve & Parts Reference

MILLIVOLT ASSEMBLY



VALVE DIAGRAM

PARTS INCLUDED

01	710-502 — Millivolt Valve
02	113/107 — Thermopile Pilot Hood
03	426 — 3/8 × 3/8 Swivel Connector
04	48-66 — 3/8 × 3/8 Straight
05	49-66 — 3/8 × 3/8 90°
06	Heatshield-710 — Heatshield
07	1751-016 — 710 LP Conversion Kit*

*LP only. Verify required conversion components for the specific appliance.

WARNING: Installer MUST follow the gas-flow direction marked on the valve. Incorrect flow direction may prevent the valve from shutting off gas.

Component identification is provided for reference. Verify the installed configuration against manufacturer specifications.

Gas Piping & Placement

BEFORE SERVICING: Turn off gas supply and electrical power to the equipment.

PIPING INSTRUCTIONS

01 Check replacement valve for multiple outlets (side outlets). Plug unused outlets using the supplied socket plugs.

02 Pipe or tubing must be clean and free of scale and dirt.

03 Pressure-test gas piping before connecting the control. High pressure can damage the control. Do not subject the control to more than 1/2 PSI (14” W.C.) inlet pressure.

04 Install a drip leg (sediment trap) if one is not already installed. All piping must comply with applicable codes, including ANSI Z223.1/NFPA 54.

05 Apply a small amount of gas-suitable pipe compound or tape to male threads, leaving the first two threads clean. Never apply compound to female threads.

06 The gas valve may be mounted in any position except upside down.

07 Install the gas valve so gas flow follows the inlet and outlet markings.

08 Do not insert unsuitable objects into the control ports. Use a backup wrench only on the wrench boss, not on the valve body. Do not overtighten connections or crack the valve body.

Millivolt Wiring

ROBERTSHAW 710-500 SERIES

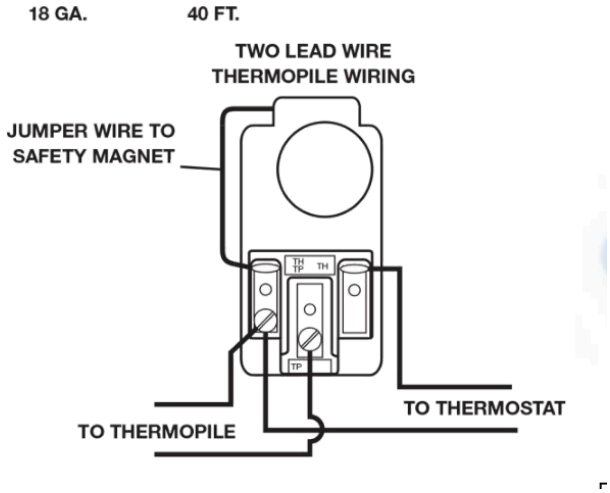
Most appliances manufactured in the USA and Canada are designed to meet ANSI standards. A change to gas-valve miswiring requirements became effective January 1, 1996. The 710-500 series millivolt gas valves have 1/4-inch and 3/16-inch quick-connect terminals on the terminal block. There is no terminal screw on the 3/16-inch side. Older applications using a terminal screw require a 3/16-inch adapter terminal.

The 710-500 Series millivolt valves are designed for 1950 Series two-lead thermopiles and compatible two-lead thermopiles producing 250–750 mV.

MAXIMUM RECOMMENDED THERMOSTAT LEAD LENGTHS

14 GA	100 FT	16 GA	64 FT	18 GA	40 FT
20 GA	25 FT	22 GA	16 FT		

TWO-LEAD THERMOPILE WIRING



Wiring must comply with applicable electrical codes. Confirm terminal connections with the specific valve model before operation.

Read Before Lighting

WARNING: Failure to follow the lighting and safety instructions exactly may cause a fire or explosion, resulting in property damage, personal injury, or loss of life.

BEFORE LIGHTING

• This appliance has a pilot that must be lighted by hand.

• Before lighting, smell all around the appliance for gas, including near the floor, because some gas is heavier than air and can settle there.

• Use only your hand to push in or turn the gas control knob. Never use tools. If the knob does not move by hand, call a qualified service technician.

• Do not use this appliance if any part has been underwater. Have a qualified service technician inspect it and replace affected controls.

WHAT TO DO IF YOU SMELL GAS

01 Do not try to light any appliance.

02 Do not touch any electrical switch or use a phone in the building.

03 Immediately call your gas supplier from a neighbor’s phone. Follow the supplier’s instructions.

04 If you cannot reach your gas supplier, call the fire department.

SAFETY NOTICE: This manual is intended for qualified installation and service personnel. Review current applicable codes and the exact appliance instructions.

Lighting & Shutdown

LIGHTING INSTRUCTIONS FOR MILLIVOLT VALVE

01 STOP. Read the safety information on the preceding page.

02 Push in the gas control knob slightly and turn clockwise to OFF.

03 Wait five (5) minutes to clear out any gas. If you smell gas, STOP and follow the gas safety instructions.

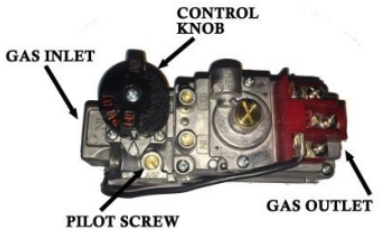
04 Locate the pilot by following the metal tube from the gas control behind the burner.

05 Turn the gas control knob counterclockwise to PILOT.

06 Push the control knob all the way in and hold it. Immediately light the pilot with a match. Continue holding the knob for about one minute after the pilot is lit, then release. The pilot should remain lit.

07 Turn the gas control knob counterclockwise to ON.

VALVE & PILOT REFERENCE



GAS CONTROL VALVE



PILOT ASSEMBLY

IMPORTANT: The knob cannot be turned from PILOT to OFF unless it is pushed in slightly. Do not force it. If the knob does not pop up when released or the pilot does not stay lit after several attempts, turn the control OFF and contact a qualified technician or gas supplier.

TO TURN OFF GAS TO APPLIANCE

Turn the knob clockwise from ON to PILOT. Push it in slightly and turn clockwise to OFF. Do not force the knob.