

# Instructions

## Lo/Hi V4944B Regulating Gas Train

### ⚠ WARNING

#### Explosion, Fire, and Gas Leak Hazard

*Do not use Teflon tape on gas piping. Damage to gas valve cutoff seals and valve bodies could cause gas leaks.*

- ▶ Pieces of tape can be cut loose during installation and lodge in gas valves causing cutoff seal problems.
- ▶ Teflon tape 'lubricates' pipe threads, allowing iron pipes to penetrate too deeply into aluminum valve bodies causing distortion and leakage.
- ▶ Use only pipe sealant compounds that are resistant to the gas being used.

### ⚠ WARNING

#### Explosion, Fire, and Asphyxiation Hazard.

*The orientation of the gas valves may have an effect on operation and safety. Gas valves shall be mounted in accordance with their manufacturer's instructions.*

### ⚠ WARNING

#### Explosion, Fire, and Gas Leak Hazard

- ▶ Do not disassemble gas valve.
- ▶ Valve must be installed with the gas flow in the same direction as the arrow.

### ⚠ WARNING

#### Explosion, Fire, and Gas Leak Hazard

*A Drip Leg is required in gas supply piping. Foreign matter could lodge in gas valve cutoff seals, resulting in gas leak-through, explosion or fire.*

Install a full-size drip leg or dirt pocket in the piping directly ahead of the main shutoff valve to capture foreign matter.

### NOTICE

CSD-1 requires that if gas pressure entering the building exceeds the rating of any gas train component, an overpressure protection device must be used.

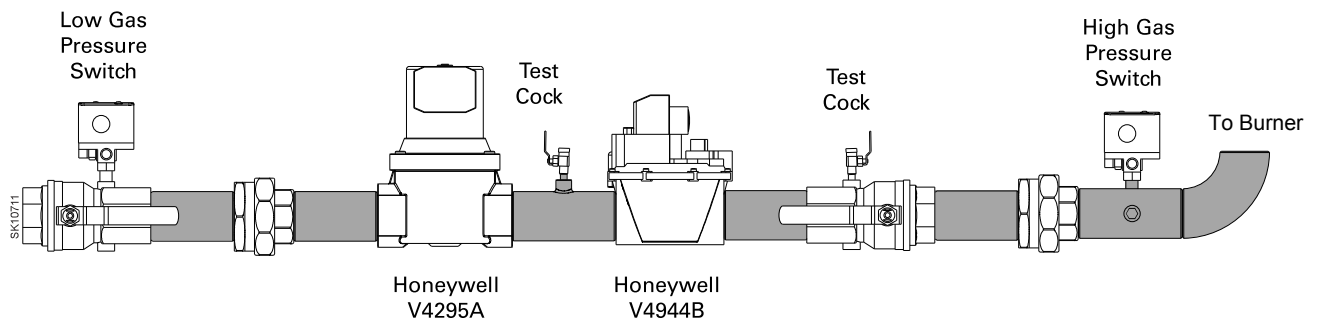
### NOTICE

All gas piping installation must comply with the latest edition of the National Fuel Gas Code ANSI Z223.1 (NFPA 54) and other applicable local codes.

### NOTICE

New facility piping must be pressure tested in accordance with ANSI Z223.1 / NFPA 54.

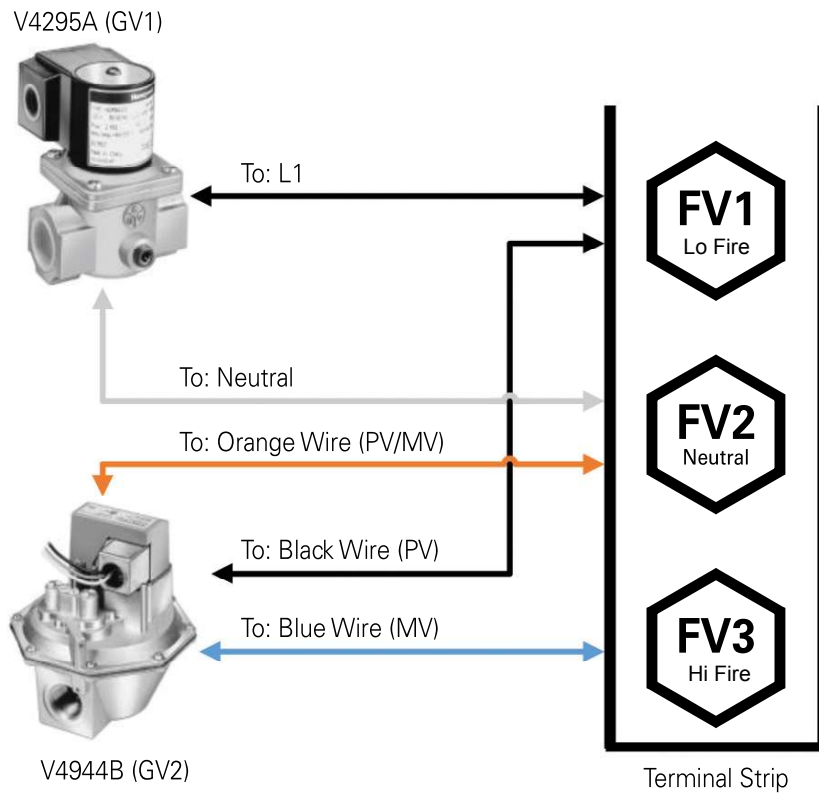
Figure 1 — UL Gas Train: Lo/Hi/Off or Lo/Hi/Lo



### NOTICE

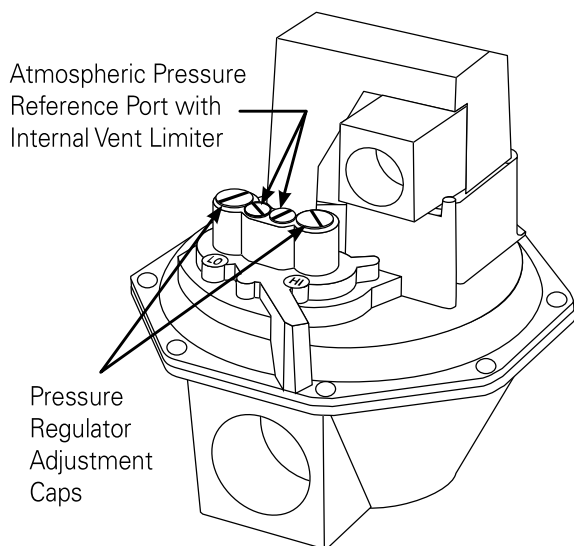
Install in location where incoming gas pressure to gas train is less than 14" w.c.

Figure 2 — Typical wiring V4944B and V4295A



- PV, PV/MV and MV are how the terminals are labeled on the V4944B Diaphragm Gas Valves.
- This valve has a black, orange and blue wire already attached to it.
- Refer to wiring diagram for terminal numbers when burner furnished with control panel.

Figure 3 — Gas Valve Pressure Adjustment



### Gas Train Instructions:

- The gas burner comes supplied with standard gas train components that meet Underwriters Laboratory(UL) and CSD-1 requirements for gas trains.
- Gas train does not come with nipples.
- The gas train is normally shipped as components and must be assembled and installed at the site.
- The gas train is used for both natural gas and propane; for converting burner, refer to burner manual.
- Verify that the gas train components are not damaged, and all piping and fittings are clean inside and out.

See **Figure 1** for typical component layout.  
See **Figure 2** for typical gas valve wiring.

### Gas Valve Pressure adjustment:

- The V4944B has Hi and Lo fire adjustments that are independent of one another.
- See **Figure 3** for location of Hi/Lo adjustment on the valve.

### Vent Lines:

Install vent lines to any gas valve component that requires atmospheric air pressure to balance a diaphragm. Vent lines must be run to the outdoors with the termination point away from fresh air intakes and windows. The terminal opening must be fitted with a wire mesh screen to block insects and other contaminants from entering the vent and must be mounted in such a position that water, ice, dirt, or any other foreign matter cannot infiltrate and block the vent piping. Make sure the final assembly is anchored securely. Refer to local codes.

