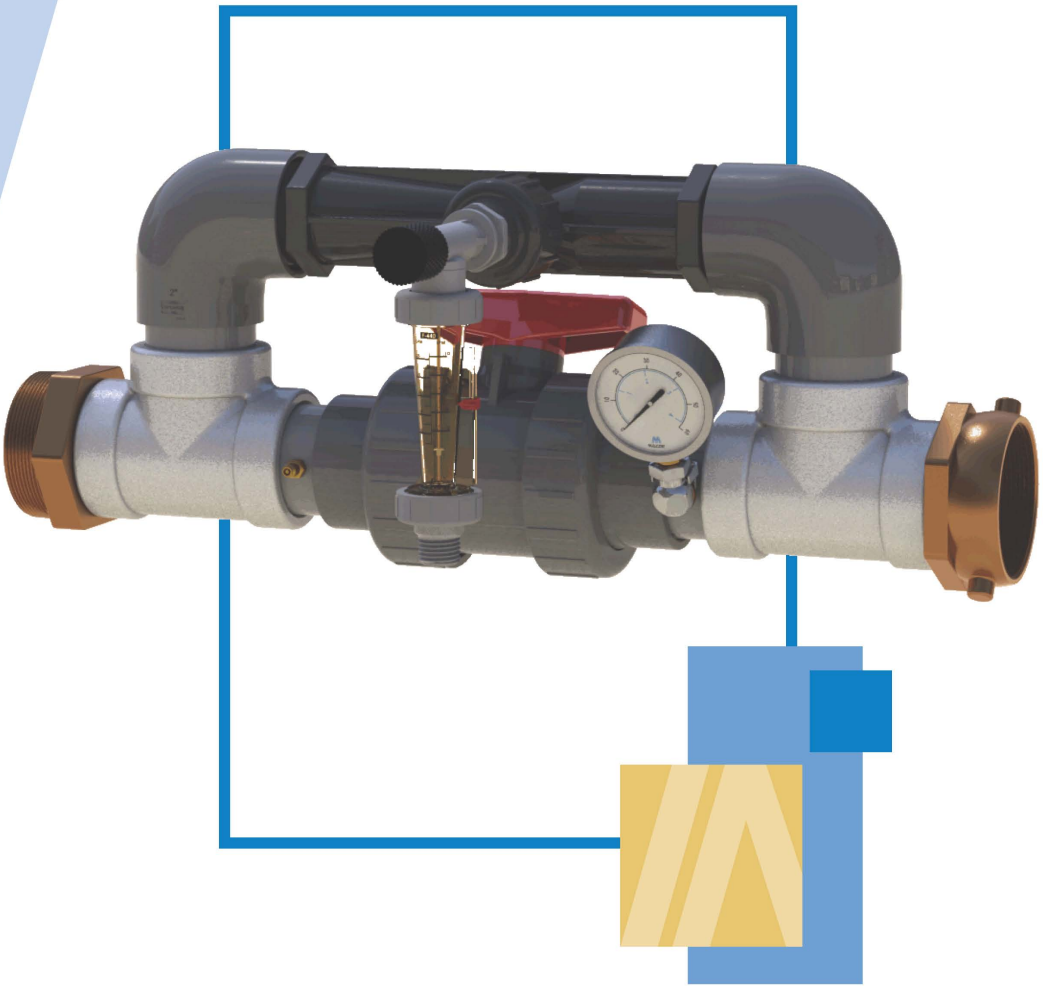
Mazzei®

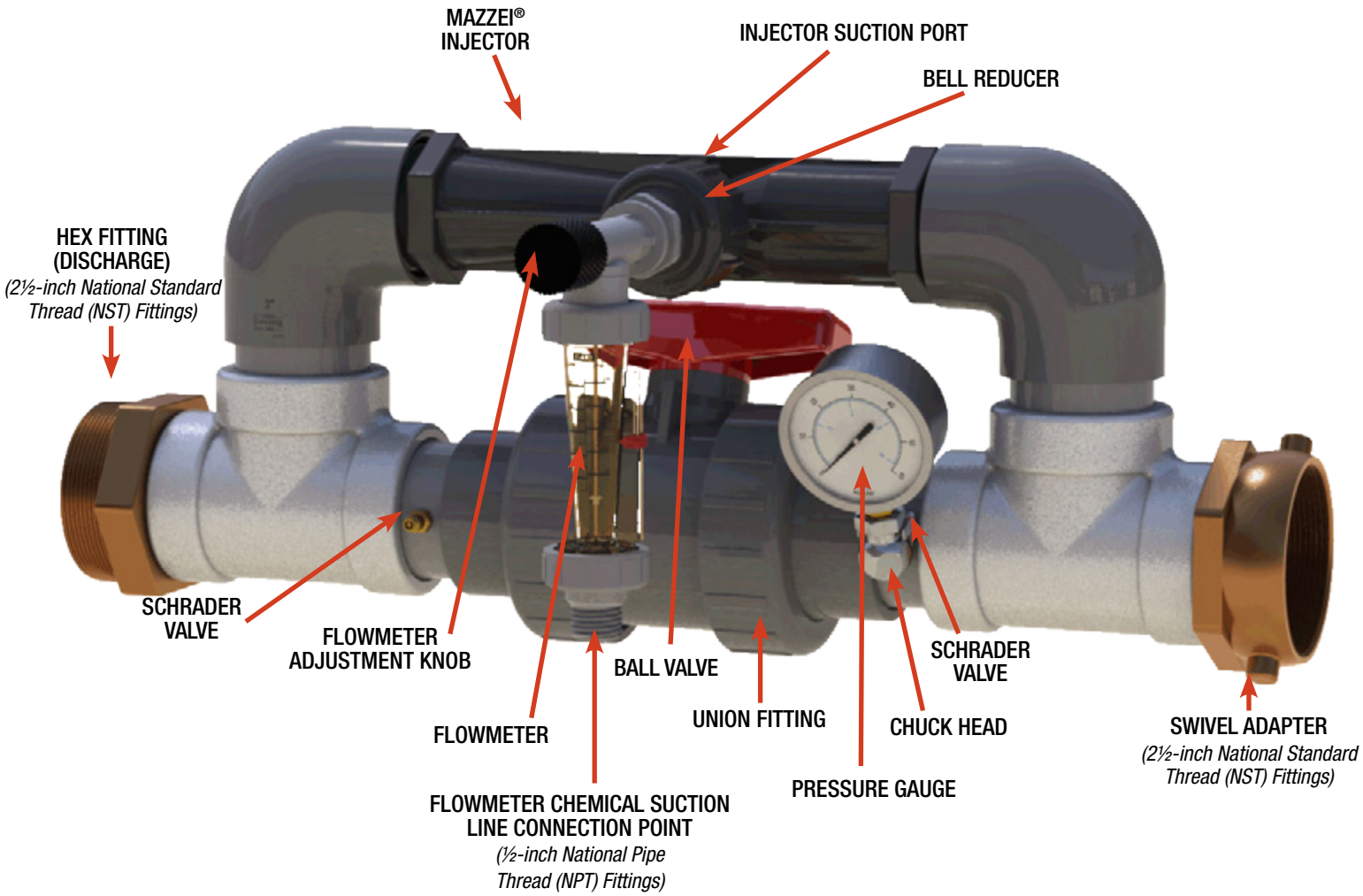
INSTALLATION GUIDE

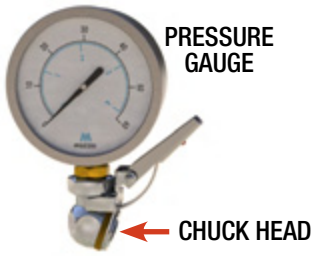
Chlorinator / De-chlorinator System



Mazzei Injector Company, LLC
500 Rooster Drive
Bakersfield, California 93307-9555

TEL 661-363-6500
FAX 661-363-7500
www.mazzei.net





A. SETUP AND OPERATING INSTRUCTIONS

NOTE: The location of the injector is factory positioned – DO NOT ROTATE INJECTOR.

1. Rotate the BALL VALVE to desired position and hand-tighten both UNION FITTINGS. Make certain that the position of the handle does not interfere with the FLOWMETER. Place BALL VALVE in the Fully Open position (see drawing above).

2. Attach FLOWMETER / BELL REDUCER assembly to MAZZEI® INJECTOR. FLOWMETER ADJUSTMENT KNOB should be in the closed position (clockwise).

3. FOR FIRE HYDRANT INSTALLATION:

   a. Connect HEX FITTING (DISCHARGE) to hose. NOTE: Any piping or hose that is connected to the outlet of the unit must be supported to avoid stressing the assembly.

   b. Align SWIVEL ADAPTER with hydrant and tighten to seal.

   c. Attach chemical suction line to FLOWMETER CHEMICAL SUCTION LINE CONNECTION POINT.

   d. Turn water on from hydrant.

   e. Adjust BALL VALVE handle to half open position (see drawing above).

   f. Adjust suction rate with FLOWMETER ADJUSTMENT KNOB. If FLOWMETER is fully open and additional suction is needed, slowly close BALL VALVE until desired suction is obtained, then fine tune suction rate by adjusting FLOWMETER ADJUSTMENT KNOB.

4. When finished using the unit, draw clean water through the FLOWMETER and into the assembly for a minimum of 60 seconds. Open BALL VALVE to fully open position and turn off water. Disconnect and drain before storing.

B. CAUTIONS

1. Hand-tighten all plastic fittings – no tools are needed.

2. Do not store unit at temperatures below 32°F.

3. Do not drop unit (may cause loss of performance or may compromise the integrity of the components).

4. Provide additional supports to any pipe/hose or other device that is connected to the discharge of the assembly.

5. Do not connect any valve or device that will cause downstream pressure of the assembly to exceed 50 psig. Excessive pressure could cause severe damage to the unit and/or operator.

6. Mazzei® Injectors should be installed with the flow arrow in a horizontal or upward position. If installed in a vertically down position, there must be at least 5 to 10 psig of outlet pressure.

7. Mazzei® Injectors require a pressure differential to operate properly. Normally, the pressure differential must be at least 25-30% [(Inlet psig – Outlet psig)/Inlet psig] for significant suction to occur. The use of a pressure gauge is necessary to measure the inlet and outlet pressures.

C. A SIMPLE TEST TO DETERMINE WHETHER OR NOT A MAZZEI® INJECTOR IS WORKING

With the suction line disconnected and the injector in operation, place your the palm of your hand over the entire suction port. Can you feel suction?

If you can feel suction and water does not spurt out the suction port during operation, the injector is generating a vacuum and is working properly.

D. REASONS WHY A MAZZEI® INJECTOR MIGHT NOT BE WORKING

WHEN PROPERLY INSTALLED AND OPERATED, THE 2081 MAZZEI® INJECTOR PROVIDES TROUBLE-FREE OPERATION. THERE ARE SOME FACTORS THAT CAN CAUSE A MAZZEI® INJECTOR TO DECREASE IN PERFORMANCE OR FAIL TO PERFORM ALTOGETHER. THESE FACTORS ARE DISCUSSED IN DETAIL BELOW.

1. Injector is Damaged: The 2081 Mazzei® Injector is made of PVDF thermoplastic. The rest of the non-metal components are PVC or polysulfone. These materials are quite resistant to abuse. They can be damaged, however, by over-tightening, from impact, or from being subjected to excessive torque.

2. Insufficient Pressure Differential: Significant suction does not begin until the water pressure differential is in the range of 25-30%. For liquid suction, Mazzei® Injectors reach maximum suction when the water pressure differential is about 50%. It is difficult to estimate water pressure differential. It should be measured with pressure gauges both upstream and downstream of the injector. A PRESSURE GAUGE with CHUCK HEAD is provided to measure operating pressures at each SCHRADER VALVE. An important characteristic of Mazzei® Injectors is that they do not, by themselves, create a pressure differential. Both the upstream and downstream pressures experienced by an injector are caused by the system into which the injector is placed, not by the injector.

3. Suction Line is Obstructed: The suction line to a Mazzei® Injector may become dirty or obstructed. It should be checked periodically to make certain it is clean and clear.

4. Obstruction within the Injector: To flush an obstruction from the injector, close the BALL VALVE and run water from the outlet (HEX FITTING (DISCHARGE)) to the inlet (SWIVEL ADAPTER) to flush any obstruction from the injector.