



# **MPA6-10C / MPA6-25C / MPA6-50C**

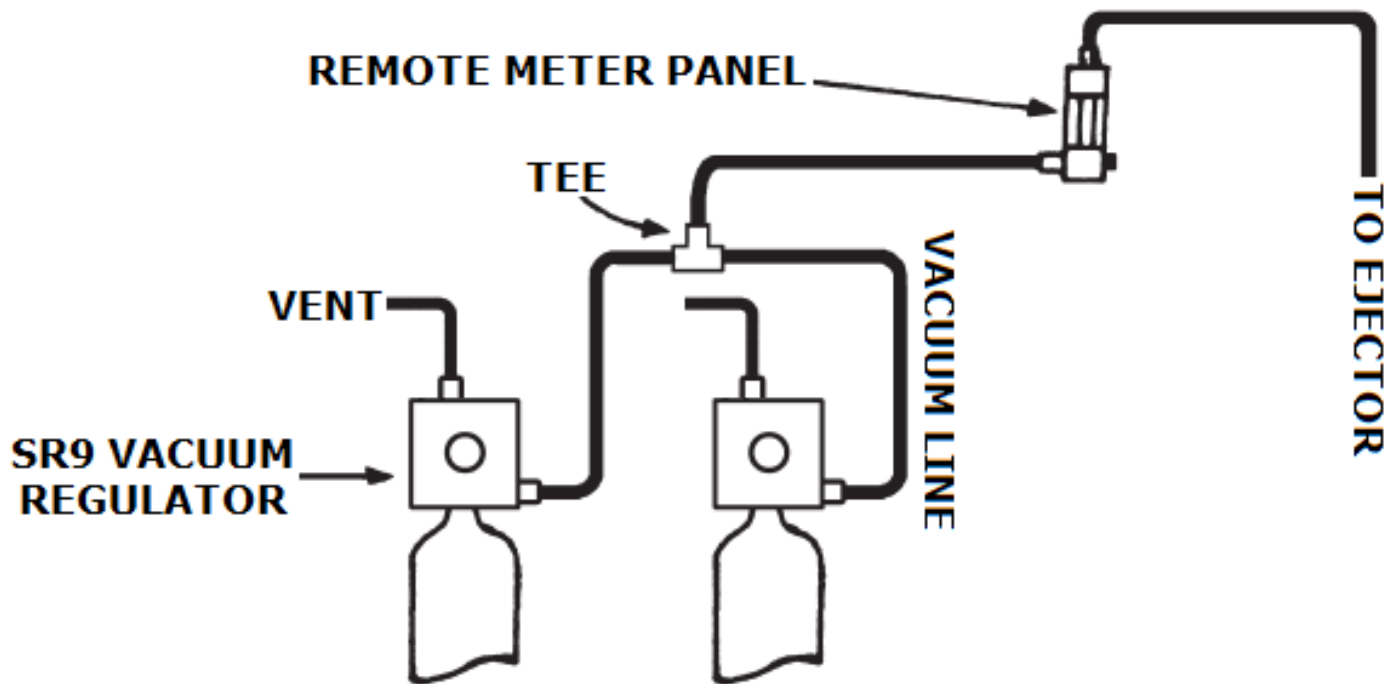
## **6" Remote Meter Panel**

Installation, Operation & Maintenance

**General:** The Archer Instruments MPA6 series of remote meter panels are designed to provide a visual indication of gas feed rate and to allow for smooth and precise feed rate adjustment.

### **Installing the Model MPA6-10C / MPA6-25C / MPA6-50C:**

- 1) The remote meter panel is typically installed on a wall or panel using the pre-drilled mounting holes found on the meter body. The remote meter panel is installed in the system between the vacuum source (ejector) and the gas source (chlorine cylinder / vacuum regulator). See the illustration on the next page.
- 2) Note that the gas flows up through the remote meter panel, and from the chlorine cylinder to the ejector. The top tubing connector is connected to the ejector (vacuum source) and the bottom tubing connector to the vacuum regulator (or tee fitting between the vacuum regulators).
- 3) Once the remote meter panel is mounted and the tubing connected, it can be used to perform a quick check on the system for vacuum leaks. By operating the ejector with the chlorine cylinder valve(s) shut, the ball in the remote meter panel should settle at the bottom and not move. If the ball continues to float above the bottom stop or if it bounces, a vacuum leak is indicated in the system.



### **Operating the MPA6-10C / MPA6-25C / MPA6-50C:**

- 1) Once installed and connected, the remote meter panel is placed into operation by opening the cylinder valves and operating the ejector.
- 2) Turn the rate control knob until the desired feed rate is indicated.

**NOTE:** The rate control valve is not designed to be used as a shut-off valve. To shut off gas feed, shut off motive water to the ejector.

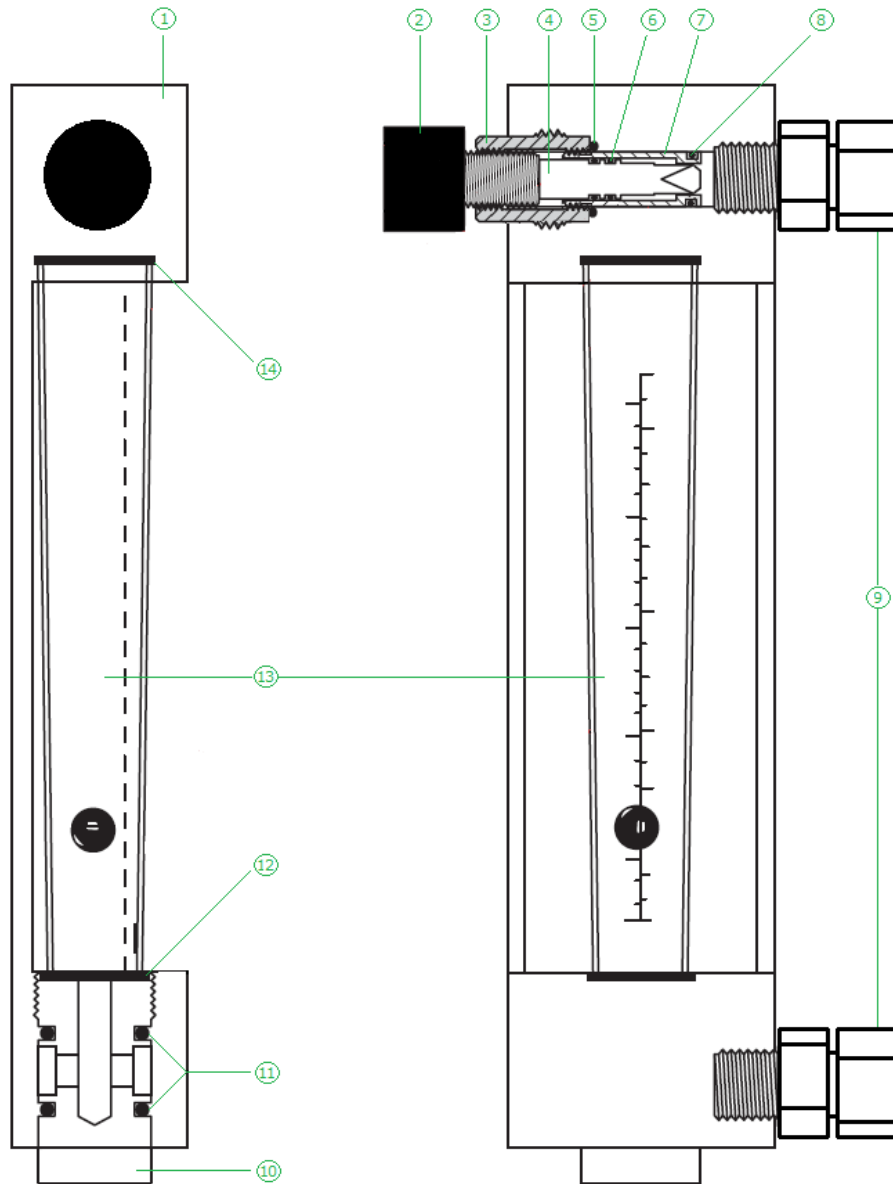
## **Maintaining the MPA6-10C / MPA6-25C / MPA6-50C:**

Recommended Maintenance Frequency: Archer Instruments recommends routine maintenance every two years - or whenever the meter tube or rate valve stem become fouled with residue or other debris (whichever occurs sooner).

-Refer to the following parts diagram when performing maintenance on the remote meter panel.

- 1) To disassemble the remote meter panel, first shut the cylinder valves and evacuate the gas inside by disconnecting the vacuum line between the remote meter panel and the vacuum regulator(s). Then remove the remote meter from the system.
- 2) Next unscrew the RVA-652 / 651 rate valve & knob from the top left of the meter body until it can be gently pulled straight out.
- 3) Remove the RVA-224 rate valve bonnet and RVA-116 rate valve sleeve by unscrewing it from the meter body using a pair of pliers.
- 4) Next remove the glass meter tube by slowly unscrewing the MIA-232 inlet plug. This clamps the glass tube into place. So take care as you unscrew it not to let the glass meter tube fall out.
- 5) The MIA-232 inlet plug can then be removed fully by unscrewing it several turns and then pulling it down.
- 6) Using a small flathead screwdriver or other small tool, remove the top and bottom meter gaskets from the meter body and inlet plug.
- 7) Clean all parts carefully. Reassemble using new o-rings and meter gaskets. Apply a thin film of Fluorolube grease to each o-ring. Install new rate valve seat if necessary.

*-Should you have any questions during maintenance of your remote meter panel, please contact your local service provider or Archer Instruments for support.*



Item#	Qty.	Part #	Description	Item#	Qty.	Part #	Description
1	1	MPA-259-XXX 250 / 500	Meter Body 250 PPD & less / 500 PPD	8	1	OA-VIT-012	O-Ring
2	1	RVA-652	Rate Valve Knob	9	2	TCA-XXX 64 / 84 / 108	Tube Connector 100, 250, 500 PPD
3	1	RVA-224	Rate Valve Bonnet	10	1	MIA-232	Meter Inlet Plug
4	1	RVA-651-XXX 100 / 250 / 500	Rate Valve Stem 100 / 250 / 500 PPD	11	2	OA-VIT-212	O-Ring
5	1	OA-VIT-112	O-Ring	12	1	MGA-XXX 3 / 115	Bottom Meter Gasket 100PPD & less / Above
6	2	OA-VIT-010	O-Ring	13	1	MTA-129-XXX 025 / 050 / 100 / 250 / 500 = PPD Scale	Meter Tube
7	1	RVA-116	Rate Valve Sleeve	14	1	MGA-XXX 3 / 116	Top Meter Gasket 100PPD & less / Above

**Notes:** Vacuum Tube Connector supplied as follows: 3/8" tubing for 100 PPD & below (TCA-64), 1/2" tubing for 250 PPD (TCA-84) and 5/8" tubing for 500 PPD (TCA-108).  
\*MPA-259-250 has 1/4" FNPT & MPA-259-500 has 1/2" FNPT



Date: Sept 2014  
Drawing Number: MP6