



## VGA-450 VENT GUARD

Installation, Operation &  
Maintenance

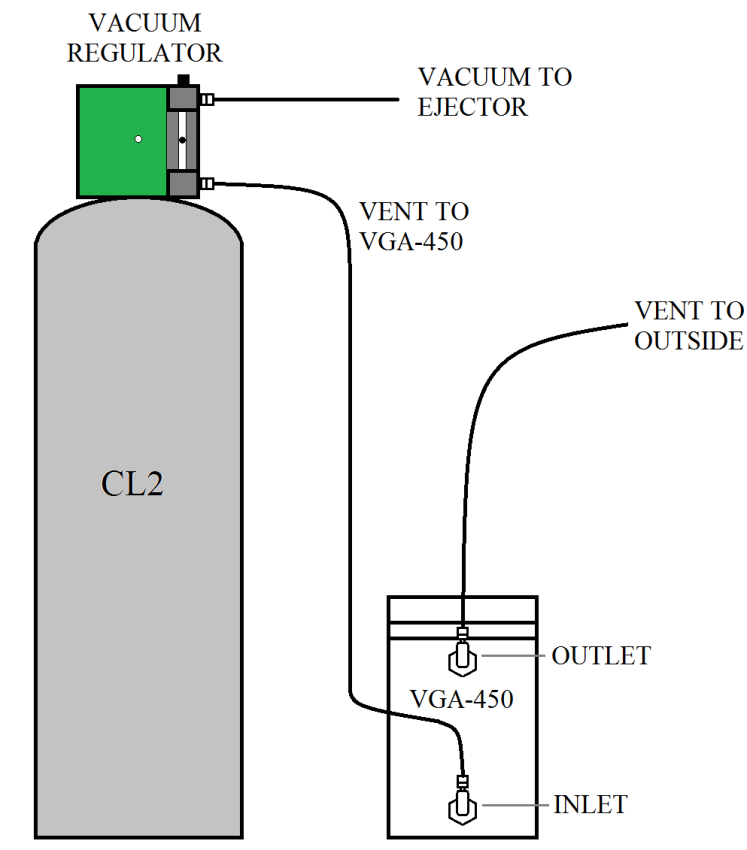


**General:** The Archer Instruments VGA-450 is designed to neutralize up to 3 pounds of venting chlorine gas. This can help to assure no gas is released to the outside atmosphere, and can also help to eliminate nuisance chlorine leak alarms caused by venting gas.

**Definition:** "Venting" – Chlorine gas that exists at a pressure above atmospheric pressure, inside of the vacuum regulator. This typically occurs only when the system is not in operation and the regulator is not under vacuum. All quality vacuum regulators are equipped with an integral relief (vent) valve designed to relieve any venting gas at low pressure (below 1 PSI) through a dedicated tubing connection, which should be connected by tubing to the outside of the building.

## **Installing the VGA-450 Vent Guard:**

- 1) Place the VGA-450 on the floor near the cylinder & vacuum regulator to which it will be connected. The VGA-450 is suitable for indoor or outdoor use (temperature > -40F).
- 2) Install the clear PVC elbow assemblies to the bulkhead fittings on the VGA-450 using the 1/2" NPT threads.
- 3) Place one strip of the chlorine indicator paper into each clear PVC elbow assembly, so that the paper is visible through the 90 degree elbow.
- 4) Install a TCA-68P tube connector in each clear PVC elbow assembly.
- 5) Connect an appropriate length of tubing from the Vent connection on the vacuum regulator to the bottom (inlet) connection on the VGA-450 Vent Guard.
- 6) Connect an appropriate length of tubing from the top (Vent to outside) connection on the VGA-450 Vent Guard to a safe location (outside of the building).
- 7) Install the Vent Bug Cap on the end of the vent tubing outside of the building. This will prevent insects from entering the system.



## **Operation of the VGA-450 Vent Guard:**

- 1) The VGA-450 will absorb up to 3 pounds of venting chlorine gas, venting at a maximum rate of 5 pounds per day (0.12 pounds per hour).
- 2) The VGA-450 is equipped with inlet and outlet chlorine colorimetric indicator strips. The white strips will turn yellow upon exposure to chlorine gas. The inlet vent strip will often turn yellow during normal operation. The media is exhausted and the VGA-450 needs to be replaced when the outlet vent strip turns yellow.

### **NOTES:**

- \* The media inside of the VGA-450 will not cause any restriction or pressure loss as gas passes through.
- \* It is recommended that the date of installation be written on the VGA-450 container with a permanent marker.

**Media:** Chemically impregnated carbon-free media that neutralizes chlorine gas. The media is spherical in shape, porous, non-flammable and capable of removing and adsorbing chlorine throughout the entire media bed. Media is a macroporous alumina oxide substrate with sodium thiosulfate impregnation capable of operating at -40°F (-40°C) temperatures.

## **Maintaining the VGA-450 Vent Guard:**

- 1) The container and media are made to be disposed of together. A new unit is ordered and put in its place. The inexpensive design allows for mutual disposal of the media and container at an environmentally acceptable site.
- 2) The only replaceable part is the chlorine indicator strip. The bottom inlet strip can be replaced as required. If it changes to yellow it shows that some venting has occurred. If the top outlet chlorine indicator strip changes to yellow, it indicates that the VGA-450 unit's media has been exhausted and the unit needs to be replaced.

### **Disposal:**

The entire bucket and spent media can be disposed of as a unit. Consult local landfill disposal laws and regulations to determine proper disposal procedures. Guidelines and regulations may vary. However, in most cases the media is considered non-hazardous and landfill disposable. The pH of the media remains between 2.5 for the spent to 10 for the fresh media. Most landfills accept solids within the pH range of 2 to 12.

*-Should you have any questions regarding your VGA-450 Vent Guard, please contact your local service provider or Archer Instruments for support.*