



# *Chemical Injection Technologies*

## Installation/Service Bulletin

### **SUPERIOR Gas Chlorinator Model “CLM” Converting to Standard Model “CL”**

If it is necessary to remove the meter panel from a “CLM” series gas chlorinator vacuum regulator, please follow the procedure below. You will need two (2) additional vacuum tubing fittings of appropriate size for your feed rate (TU-150/250/550).

1. Close the chlorine cylinder valve and vacuum down the system. Whenever possible, it is advisable to draw air through the system before dismantling any part of the vacuum regulator for service. This can be accomplished by first removing the vacuum tubing from the metering tube outlet to allow air to enter and release the vacuum. This will permit the regulating diaphragm to return to its neutral position. Reattach the vacuum tubing and start the ejector, allowing air to pass through the system. Turn off the ejector and remove the vacuum tubing.
2. Unscrew the rate valve plug (RV-140/240/540) from the top of the meter panel and apply upward pressure until it “pops” out of the rate valve seat (RV-130/230/530). *NOTE: See Bulletin 4001 for detailed instructions and photos.*
3. Insert a nail or thin screwdriver *through* two of the four holes in the top of the rate valve seat. While holding the chlorine flow metering tube with one hand, turn the seat counter-clockwise. The metering tube will loosen and may be removed. It is not necessary to remove the rate valve seat from the metering panel. Take care not to lose the metering tube gaskets. Do not allow the glass ball to fall out of the metering tube.
4. Insert a Phillips head screwdriver through the hole under the vacuum tube fitting, and across the meter panel to engage the mounting screw (SO-173). Unscrew the mounting screw by turning counter-clockwise until it can be removed.
5. Grasp the meter panel in one hand, and the vacuum regulator in the other. Carefully turn the meter panel from the top of the panel, in a counter-clockwise direction. This will pivot the entire meter panel around the tan colored PVDF pipe nipple which is also screwed into the vacuum regulator. Continue turning the meter panel until it disengages from the vacuum regulator.
6. Replace the glass flow metering tube and rate valve in the remote meter panel.
7. The tan colored PVDF pipe nipple will remain attached to either the meter panel or the vacuum regulator and must be removed with an appropriate size wrench. Be certain to remove any loose Teflon pipe sealing tape, so it cannot enter the gas flow.
8. Attach two (2) tubing connector fittings of appropriate size (TU-150/250/550) for the tubing you are using; one (1) to the vacuum regulator and one (1) to the meter panel into the threaded holes left by the removal of the pipe nipple.
9. Install remote meter panel right side up in a location that is convenient for the operator and/or affords greatest security. Connect vacuum tubing from the vacuum regulator to the remote meter panel. *NOTE: An FIL-1 in-line chlorine gas filter may be inserted into the vacuum tubing between the vacuum regulator and remote meter panel for very low chlorine feed rate applications, below 5 PPD (100 GR/HR).*
10. Check the system for vacuum integrity before placing the unit back into chlorine gas service.