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Environmental Management Department
Protecting Public Health and the Environment

Vacuum Gauge FAQs

1. **Q:** What is the purpose of a vacuum gauge?

   A: The vacuum gauge helps to determine the total dynamic head (TDH) on the system and with the pressure gauge reading will give an accurate TDH that can be used with the pump curve to determine pumps flow capacity.

2. **Q:** Where should a vacuum gauge be installed?

   A: A vacuum gauge should be installed on the drain port under the strainer basket of the pump. The gauge may also be installed on the pipe after all suction pipes merge before entering the pump. The gauge should not be installed on the port near the impeller; this would measure the pressure not the vacuum.

   Vacuum gauge   Pressure gauge
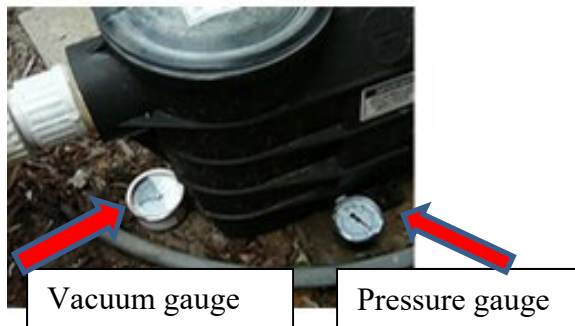
3. **Q:** Which pumps are required to have a vacuum gauge?

   A: All booster and recirculation pumps are required to have a vacuum gauge, except pumps that have a Vacless installed on them. The vacuum reading may be taken from the Vacless gauge.

4. **Q:** My SVRS has a vacuum reading, does this meet the requirement?

   A: Yes. Any gauge that reads the vacuum of the ENTIRE system (i.e.: after the skimmer and main drain pipes converge) may be used as the vacuum reading.

5. **Q:** What is a good/bad vacuum gauge reading:

   A: Most pumps should be operating around 8 inHg. A 0 reading would be rare and would most likely indicate that the gauge is not working properly.
   - If a gauge is installed in the wrong location the reading may also read 0 inHg.
   - If the needle on the gauge is fluctuating up and down, this may mean the pump has lost its prime or the SVRS has tripped.
   - Some pumps may have a compound gauge that reads the pressure (PSI) and vacuum (inHg). If the compound gauge is installed on the suction side of the pump it will read vacuum only.
   - Some gauges will read negative inHg. Vacuum is negative pressure. There is no need to write a negative symbol.

Vacuum gauge

Compound gauge