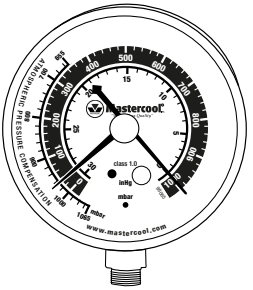
Mastercool® Inc.
"World Class Quality"

ANALOG VACUUM GAUGE

Mastercool's hand-held analog vacuum, class 1.0, gauge is designed with the highest quality to provide accurate readings every time.



SPECIFICATIONS

- Gauge size: 80 mm
- Units: inhg 30-0 and mbar 0-1000
- Atmospheric pressure compensation: 1065-655 mbar
- Accuracy: EU Class 1, ASME Grade 1A

FEATURES

- Large, 80mm gauge makes it easier and more accurate to read than smaller gauges
- Indicator needle to mark pressure for testing provides a backup in case you forget to write the pressure down. You can see if the pressure has changed with a quick glance
- Barometric pressure compensation lets you know if you are at maximum vacuum even at altitudes above sea level and the local weather conditions

WARNING

THIS GAUGE IS ONLY FOR VACUUM. Positive pressure will immediately damage the gauge. If you damage the gauge with positive pressure, Mastercool will not replace the gauge under warranty.

INSTRUCTIONS

1. Checking system vacuum level:
   For best system vacuum reading, connect gauge directly to the system, close to an access port. Using this gauge, you will be able to read how deep of a vacuum is being achieved.

   Once the pressure on the gauge stops decreasing, the system is under the most vacuum that can be achieved with the system and your setup. If the vacuum does not come close to absolute zero (see #2), there could be a leak or some refrigerant left in the system.

   NOTE: How long the vacuum pump needs to be run depends on the size of the system under vacuum and your vacuum pump.

2. Reading absolute zero:
   a. Obtain the local barometric pressure. This can be found on various weather websites. A local airport will have the barometric pressure. An approximation can be done by looking at a chart that has the decrease in pressure due to altitude, assuming you know your altitude.

   b. Find the barometric pressure on the small outer scale (fig 1). That will be absolute zero - the lowest vacuum reading that can be achieved.

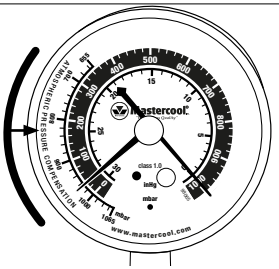


FIGURE 1

3. Leak testing procedure:

a. Connect directly to system through an access port with a T fitting and ball valve as (fig 2).

b. Run vacuum pump until desired vacuum level is reached.

c. Mark the vacuum level using the red indicator needle, by turning the knob in the center of the gauge. It would be best practice to write the pressure down as well.

d. Close the ball valve. For best results, remove the hoses and place a cap on the ball valve.

e. Allow for a minimum of 5 minutes for system to stabilize. If the pressure increases during the five minutes, there is a leak in the system or fittings, and/or the system still has some refrigerant left in it. Reattach the hoses and run the vacuum pump for a long period of time. Then repeat, closing the ball valve and waiting five minutes. If the vacuum increases slower than before, there is still some refrigerant or water in the system. If it goes up at the same rate, there is a leak. Be sure to check the gaskets on the vacuum gauge, tee and ball valve to make sure they are clean and in good shape.

f. After the allotted vacuum test time (we recommend at least 15 minutes) view the gauge to check for a leak. If the red leak test indicator is still directly in line with the black needle on the vacuum gauge you should not have a leak in the system. If you notice that the needle on the gauge has drifted higher and is not aligned with the leak test indicator, it can be a sign of a leak in your system.

FIGURE 2