

TECHNICAL SERVICE BULLETIN

Date: March 2008

From: Lynx Grills Customer Service

Subject: Measurement of Gas Pressure using a Manometer

Pressure may be defined as a force per unit of area such as pounds per square inch (PSI) or in low pressure air and fuel gas applications as inches water column (in. w.c.). The simplest method involves balancing the gas pressure against a column of liquid of known weight (water) in a flexible U-Tube and measuring the height of the water column. Digital and analog pressure gages are also available. Be sure to zero your manometer prior to measuring gas pressure.

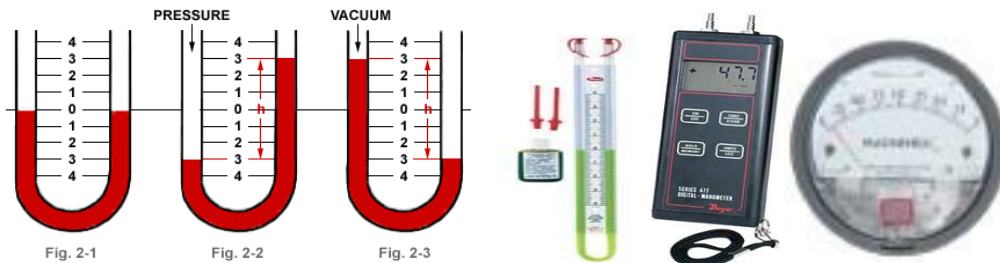


Fig 1 – A simple U-Tube type manometer under static no-load condition
 Fig 2 - Under positive pressure, the difference in height indicates pressure
 Fig 3 - Under vacuum pressure the difference in height indicates negative pressure
 Fig 4 – Simple U-Tube Manometer
 Fig 5 – Digital Manometer
 Fig 6 – Magnehelic Pressure Gage

The gas manifold is provided with a 3/8" tapped opening that can be fitted with a pressure tap. A flexible plastic tube is then attached to the pressure tap and to the manometer to read the manifold gas pressure.

An easier method involves removing the cooking grate and briquettes, and the burner furthest from the gas inlet supply. Take the plastic tube and insert it over the burner orifice. For accuracy, be sure the connection is snug and without gas leaks. Turn on that burner and note the manifold gas pressure. Next, turn on other gas valves and note the gas pressure. During these tests the gas pressure should remain steady at nominal pressures of 11" w.c for LP and 4" w.c. for natural gas. Any significant drop in gas pressure suggests an insufficient manifold gas pressure.

Consult the National Fuel Gas Code, professional plumber or the local gas supplier to determine if supply line pressure and capacity are sufficient for proper operation.

Contact Lynx technical services at 888-289-5969 if you have any questions.