The Mystery of Blender Bleeds Unraveled

Simply put, the blender requires a minimum flow of gas passing through it to ensure its accuracy. This minimum flow rate varies depending on the series of blender; Low Flow blenders have a flow that passes through the blender and out the bottom (known as the bleed), at a rate of 3LPM while the High/Low series has a bleed rate of 10-12LPM. The Low Flow series requires this bleed to be on for accuracy of flows below 3LPM, and High/Low Flow series below 15LPM. Any time the blender is being used below these flows, the bleed must be on.

The bleed is controlled by whatever is on the right side of the blender. This could be a DISS fitting, a knob or a flowmeter. In the case of the DISS fitting, the bleed is turned on any time something is connected to this fitting. When a knob is present, the bleed is turned on by setting the bleed knob to <3LPM. When a flowmeter bleed switch is present on the right side, the bleed is turned on by rotating the flowmeter into its vertical position.

Why do you need to know about bleeds?
There are two main reasons. First, it helps in the decision process when choosing which blender is best for your needs and secondly, it helps you to understand when you need to turn the bleed on and when you don’t.

Why choose a blender with an ON/OFF bleed control?
Using the bleed control (Knob or Switch) allows you to turn off the bleed so you can conserve oxygen without having to disconnect anything from the blender. Equipment is always ready for immediate use with the flip of a switch or knob in any emergency situation. This saves you time, gas and money!

When do you need to turn on the bleed?
Turn on the bleed when the flow through the blender is less than 3LPM or 15LPM for the Low Flow and High/Low Flow series respectively (this does not mean per port, but rather total flow). In other words, as long as the flow is above the minimum using any combination of ports, you don’t need the bleed. When below, turn on the bleed.
The bleed turns ON when:
- Any equipment (normally a flowmeter) is attached to the right port
  - When the flowmeter is ON, the bleed is ON
  - When the flowmeter is OFF, the bleed is ON
- A Bleed Knob is turned ON
- A Bleed Switch is turned ON

When the bleed is on the left and/or bottom, the port receives greater accuracy.

**Blender bleeds are needed for ± 3% accuracy when:**
- Flowmeters on the left side of a Low Flow Blender are set below 3 LPM
- Flowmeters on the left side of a High/Low Flow Blender are set below 15 LPM

**The bleed turns OFF when:**
- Any equipment (normally a flowmeter) is removed from the right port
- A Bleed Switch is turned OFF
- A Bleed Knob is turned OFF

© 2015 Ohio Medical Corporation. This document contains information that is proprietary and confidential to Ohio Medical Corporation. Use of this information is under license from Ohio Medical Corporation. Any use other than that authorized by Ohio Medical Corporation is prohibited. Ohio Medical Corporation and the Ohio Medical logo are registered trademarks of Ohio Medical Corporation.

For more information, or to see our full Medical Gas Blender product line visit:

www.ohiomedical.com