



BGI INCORPORATED
58 Guinan Street
Waltham, MA 02154
Telephone 617-891-9380
Fax No.: 617-891-8151

INSTRUCTIONS: BF-1 AND BF-1A BAG FILLING PUMP

Introduction:

The BGI Bag Filling Pumps are a development of the BGI AFC-123 Personal Sampler. The primary instructions, regarding the mechanical operation of the unit is the AFC-123 instruction manual.

The difference between the AFC-123 and BF-1 and BF-1A are as follows:

1. The pulsation damper and inlet filter have been eliminated.
2. All gas contact parts are fabricated from stainless steel and teflon.

Therefore, when ordering spare parts, it is essential to stipulate that they are for the BF-1 or BF-1A. The BF-1A is identified by having a discharge tube (outlet) which is longer than the inlet tube.

Operation:

BF-1: This instrument has a flow rate range of 1 to 3 liters per minute. In all other respects the AFC-123 operation manual applies.

BF-1A: The BF-1A outlet tube has a throttle valve fitted to it. This valve restricts the flow to its design range of 200 to 1000 cc/minute. There are a few important points to be observed in using the BF-1A.

1. **DO NOT** remove the throttle valve completely. This does not turn the BF-1A into a BF-1.
2. **DO NOT** attempt to reset the internal controls.
3. When calibrating the BF-1A, change the flow rate primarily by adjusting the outlet valve. This is done with the plastic potentiometer adjusting screwdriver provided or an small screwdriver. The external potentiometer is used only if the desired flow can not be set with the valve.
4. **ALWAYS** attach you calibration device (rotometer, soap film meter) to the discharge tube only!!

General:

Remember both the BF-1 and BF-1A have no internal filters whatsoever. Any filtering device would not only collect dirt, but the collected material would affect the composition of the gases being sampled. Therefore, the internal parts may become soiled and require user or factory cleaning. Do not attempt to clean internal passages with liquids. Cleaning should only be carried out after thorough disassembly.

If it becomes desirable to fit an external filter, this must be user supplied and fitted. It is not possible for BGI to make recommendations in this regard, due to the complex nature of possible sampling strategies.

LIMITED WARRANTY

BGI Incorporated warrants equipment of its manufacture and bearing its nameplate to be free from defects in workmanship and material. We make no warranty, express or implied, except as set forth herein.

BGI's liability under this warranty extends for a period of one (1) year from the date of BGI's shipment. It is expressly limited to repairing or replacing at the factory during this period and at BGI's option, any device or part which shall within one year of delivery to the original purchaser, be returned to the factory, transportation prepaid and which on examination shall in fact be proved defective. BGI assumes no liability for consequential damages of any kind. The purchaser, by acceptance of this equipment, shall assume all liability for consequences of its misuse by the purchaser, his employees or others. This warranty will be void if the equipment is not handled, installed, or operated in accordance with our instructions. If damage occurs during transportation to the purchaser, BGI must be notified immediately upon arrival of the equipment. Return transportation charges are collect.

A defective part in the meaning of this warranty shall not, when such part is capable of being repaired or replaced, constitute a reason for considering the complete equipment defective. Acknowledgement and approval must be received from BGI prior to returning parts or equipment for credit.

BGI Incorporated makes engineering changes and improvements from time to time on instruments of its manufacture. We are under no obligation to retrofit these improvements and/or changes into instruments which have already been purchased.

No representative of ours has authority to change or modify this warranty in any respect.