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MICROCON[®] Ex-BB & BUV Instructions & Service Manual

OVERVIEW

The MICROCON[®] EX-BB is a high capacity HEPA filtered air purification device to provide pressure within a room by exhausting a portion of the internal air through a HEPA filter. The unit has a two speed (HIGH & LOW) locking key switch. HIGH speed is to the LEFT, OFF is in MIDDLE, LOW speed is to the RIGHT.

PLACEMENT

It should be set-up with the rear exhaust duct as close to the point of exit as possible. A flexible duct can be attached to the rear exhaust duct. However, the longer the length of duct run, the more resistance on the fan to push this air through. This translates to having less exhaust capacity or CFM proportionally to the length of ducting used.

START-UP

Once a location is established and the duct connection made, the HEPA filter securely locked in place, plug in the power cord. Activate the unit by turning the key switch to extreme left or right position. The fan will begin to function. Remove the key from switch, and unit will be locked with this speed setting.

SPEED SETTING

The MAXIMUM capacity of the fan is obtained when the switch is turned to the far LEFT position. By switching to the far RIGHT, the fan speed will function on the LOW setting. The manometric gauge will register the pressure differential and is displayed in WG (water gauge) inches of water. The higher the speed setting, the higher the resistance will register. As the filter becomes clogged, the pressure will gradually increase.

Determine the speed switch setting to achieve the negative pressure differential required. The unit can be left running on a constant basis if necessary.

PRE-FILTER RENEWAL

(Replacement Part No.: PF-EXBB002)

The pre-filter must be changed periodically. *(Do not attempt to change filter when unit is operating. Disconnect the electric plug.)* Filter performance can be determined by monitoring the minihelic gauge resistance reading. Usually an increase of .1" WG (above the initial pressure reading) signals a pre-filter replacement. Replacing the pre-filter will lower the resistance reading proportionally.

INSTALLING A NEW PRE-FILTER

As a safety precaution, a mask and latex gloves can be used when performing filter maintenance operation. When replacing the pre-filter, remove the aluminum screen. Slide a plastic bag over the filter cube so it encapsulates the rear section. Reach into the bag, grabbing the plastic extraction tab attached to the filter face and extract it directly into the bag. Seal off the bag and dispose of properly. After the pre-filter has been removed, replace it with a new one by placing it into the filter cube. The pre-filter, being slightly oversized, will form a mechanical seal around the edge eliminating by-pass.

REPLACING THE HEPA FILTER

(Replacement Part No.: HF-EXBB002)

Note: Used HEPA Filter – Treat as Contaminated Substance.

Filter replacement is usually required when the minihelic gauge measures about a 50% initial pressure increase. When the HEPA filter cube has to be replaced, a similar procedure should be followed. Use a plastic disposal bag to encapsulate the filter.

This too can be monitored by watching the minihelic gauge, or the filter can be replaced on a periodic basis. HEPA replacement requires aligning the HEPA with the draw latches and determining the HEPA is properly sealed to the fan base unit. It is suggested that the pre-filter be renewed at the same time as the HEPA.

CLEANING

Other than periodic dusting or cleaning of the cabinet, there is no additional maintenance required on the system. A good stainless cleaner or mild detergent will do the job. Neither the pre-filter nor the HEPA are designed to be cleaned. They are not reusable and must be disposed of when used. Be particularly careful not to damage the filter elements themselves or get either filter wet when cleaning.

RETURNING MODULES TO FACTORY

Before shipping any component to the factory, a Return Material Authorization must be issued by the factory for units under warranty. For units out of warranty, a written purchase order must be issued to Biological Controls prior to return. The factory will NOT accept and will refuse any merchandise returned without the proper written authorization. Factory is not responsible for any damage to the unit during return shipping.

DO NOT return any used filter modules or pre-filters to the factory under any circumstances.

SPECIFICATIONS FOR MICROCON EX-BB

Cabinet:

Dimensions: 12.37" (W) x 12.37" (H) x 26" (L)
Material: Stainless steel construction
Weight: 70 lbs.
Pressure Monitoring: Minihelic gauge 0.0" to 2.0" WG
Key switch: 3 position locking - HIGH, OFF, LOW
Exhaust duct opening: 6" x 9 7/8"
Modular Design: Interlocking components with draw latches

Blower:

Blower: Low noise performance
Blower: High efficiency, double inlet, PSC forward curved
Blower: 1/5 HP 50/60 Hz
Free Air CFM: 760 High, 545 Low
CFM capacity delivered: 495 High, 435 Low
Speed Control: 2 Speed
RMP: 1450 High, 1100 Low
Electrical: 115V, 3.90 amps
Electrical: Hospital grade cord and plug
Heat overload: Auto reset thermal protection

Filtration:

HEPA: 99.99% on 0.3 micron size
Pre-filter: Synthetic 30% efficient
HEPA cabinet: Laminated plastic with aluminum inlet grille
Change-out: Bag-out change
Dimensions: 12¼" (W) x 12¼" (H) x 12" (D)

LIMITED WARRANTY

Biological Controls Inc. (BCI) warrants to its purchasers that all products sold by it will be free of manufacturing and material defects. Any defective product will be replaced, free of any charge if a claim is brought to BCI's attention in writing, within ONE year following the date of shipment by BCI. BCI will not be responsible for any installation costs involved in such replacement. Replacement will include shipment cost within the continental United States. This warranty is IN LIEU OF any other warranty, express or implied, including, but not limited to, any implied **WARRANTY OF MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.** BCI's liability under this warranty is limited to replacement and does not include any responsibility for incidental or consequential damages of any nature.

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