

### Booster Fan SOP - Filter Replacement

# Introduction

The booster fan (Part No. 83200) has a prefilter and a HEPA filter that require intermittent replacement. The replacement interval is dependent upon usage, and a maintenance protocol should be developed specifically for each vivarium. Please contact Animal Care Systems for assistance with this protocol.

This procedure requires approximately five minutes, a ladder, and a Phillips screwdriver.



## Filter Replacement

- 1. Unplug the booster fan from the rack (and from the ceiling drop if using the building HVAC); use a ladder.
- 2. Unplug the power cord from the booster fan.
- 3. Carefully lift the booster fan from the top of the rack and place it upon a work surface, with its four rubber feet flat and stable.
- 4. Unscrew the screw latch (Figure 1) on each side.





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- 5. Lift the top enclosure of the booster fan from the unit base using the connecting ports as a handle (Figure 4).
- 6. Remove the prefilter to access the HEPA filter (Figure 5); the prefilter may stick with the top enclosure.
- 7. Lift out the HEPA filter using both hands (Figure 6).



- 8. Carefully install the new HEPA filter to ensure it rests against the screws in the interior of the case (Figure 7); the airflow indicator arrow on the side of the HEPA filter must point downward toward the feet; wiggle the HEPA filter to ensure all four corners sit within the screws. Do not touch the filter pleats.
- 9. Position the new prefilter within the top enclosure (Figure 8), ensuring the airflow indicator arrow on its side points upward as it goes into the top enclosure. Ensure the filter is inserted past the screw ends on the inside of the top enclosure.
- 10. Slowly lower the top enclosure down onto the unit base using the connecting ports as a handle (Figure 9); the prefilter should stay within the top; wiggle the enclosure, if needed, to seat it fully against the base. The edges of the top and base should be about 1/2-inch apart when the top is ready to be tightened (Figure 10).







HEPA filters are compromised when anything touches the pleats.



Figure 9

Figure 8



Figure 10

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- 11. Pre-tighten all the screw latches (Figure 11) with a screwdriver.
- 12. After pre-tightening, tighten as depicted in Figure 12.

### **Pre-Tightened**





Figure 11



# **Replacement Part Numbers**

Prefilter: M49F1212 HEPA filter: BF49MPH12124PF