

Optimizing the airflow for the MultiCage Training Arena

The MultiCage Training Arena or the MultiCage upgrade kit that converts the Mobile HomeCage Large into the MultiCage Arena allow training three (20-35 g) mice simultaneously.

The MultiCage requires an airflow of 250 L/m at 20kPa (2,9 psi or 150 mbar). Most centralized laboratory air systems provide sufficient airflow and pressure. However, some central air systems and most portable air pumps do not. Follow these steps to reduce the airflow required to operate the MultiCage:

Place the Multicage on a table or a work bench; remove both bridges and both sets of towers.



Unscrew the air dispenser lid and flip it upside down. Prepare scissors and a sheet of plastic or other material impermeable to air (e.g. plastic used to cover kitchen surfaces)



Cut out a piece of plastic sufficient to cover the entire lid. It is fine to leave 2-3 cm along the edges exposed. Place the carbon fiber cages onto the plastic sheet (imitating the way they are placed during operation) and mark their approximate size and location.



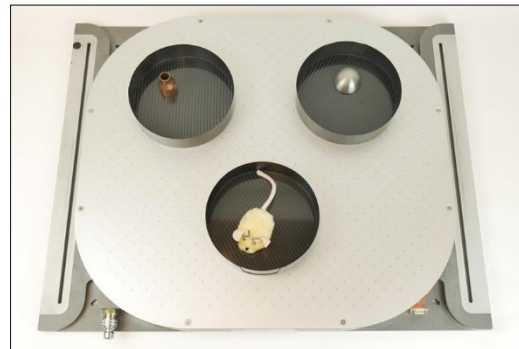
Remove the cages and cut out three holes in the place of your markings.



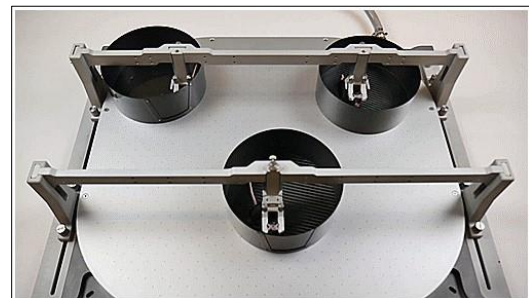
Attach the plastic sheet to the inside of the lid: reduce air leakage by sealing all edges as much as possible. It does not need to be pretty 😊



Flip the lid to the other side and screw it back on top of the air dispenser. After re-assembly, test cage flotation with weights approximately corresponding to mouse weights.



Repeat with real mice!



Tell us if you need more help:

email mhc-support@neurotar.com or reach out on chat at www.neurotar.com

Thank you and happy training!

Can I add locomotion tracking to the MultiCage?

- *Yes, you can if the purpose is to track one cage:
<https://www.neurotar.com/product/locomotion-tracking-upgrade/>
Tracking all three cages is currently not possible*