Lack Enclosure HEPA Air Filter and VOC Activated Charcoal Pellets

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VIEW IN BROWSER

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Summary

Air filtration system designed for fine particulates and charcoal to absorb VOC emissions, can be printed on a Mini.

3D Printers > Accessories

Tags: lackenclosure airfilter voc charcoalfilter

In a previous design for an air filtration system I had to cut away into the plexiglass in the lack enclosure and added a screen material for the charcoal pellets. In this design I used the Infill percentage removing top and bottom layers in the base and tray to create a permanent screen filter. The fan mount is the only piece which requires hardware Bolts and Heat Sets, the air filter stays in without the cover which is attached with magnets, everything else is interlocked, press fit or held with a printed screw.

80mm 12V Fan

Roomba HEPA filters
Activated Filter Carbon Pellets
8x3 Magnets

Model files

air-filter-tray.stl

air-filter-base-mount.stl

air-filter-fan-mount.stl

air-filter-cover.stl

air-filter-fan-cover.stl

air-filter-base.stl

air-filter-head.stl

air-filter-bolt-joining.stl

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