



Mobula 8 Replacement Frame



InternalError33

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Summary

This is a frame that I designed as a replacement for the stock Mobula 8 Frame.

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*****This Frame is fairly fragile. It will not survive moderate impacts*****

I wanted to experiment with 3D Printed frames after snapping one of the plastic pins on my Mobula 8 Frame. This is my first attempt (well, first attempt that actually made it to flight) at making a frame with prop guards. It's meant to be kind of a one for one swap with the stock frame and canopy.

The design is not as robust as I would like, but I didn't want to add too much more weight as it already comes in 2 grams or so over the stock setup. I have no plans to continue developing this frame since it doesn't

seem like a viable long term solution for me. I wasn't even going to upload the models, but had a few requests from the r/tinywhoop community where I shared a picture. The frame works fine. Just don't crash.

A more major way that I deviated from the stock set up is that I made battery retention clips that can be designed for any battery size and swapped out. They are held in place in a sort of belt-and-belloops sort of design where inserting the battery locks them in place. I will include a step file to make modifying the battery retention clips a little easier. This feature will be included in future frame designs of mine for sure.

The only parts that you will need source that don't come with the Mobula 8 are 4 M2x12 screws that mount through the frame and board and screw into the camera canopy from below. These are replacing the weak point of the thin plastic pins that I broke on my original frame. The holes in the canopy are sized in such a way that the screws will cut their own threads, but I would cut the threads prior to final assembly to make it go together easier when you have all of the parts together.

Model files



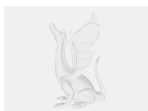
mob8_frame.stl



battery_retainer.stl



camera_canopy.stl



battery_retainer.step

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