

# Monster Quad

Build Guide Rev 1.2

# Notes on Build

Would recommend building the quad with the motors inverted, A Plate on top, B Plate below. This allows the fewest wiring connections between the plates.

Use Threadlock

Use Lacing Cord to wire manage motor wires over prop area so zip ties can't become undone and hit the prop.

Use Lacing Cord liberally to manage wires.

Middle landing gear can be mounted as desired

Run velcro straps under the flight controller through middle hole before mounting. Tie velcro down with Lacing Cord.

Cut sticky grip to fit for battery mounting. That battery area is devoid of washers so the grip can elevate the battery over the bolt heads.

We tested with a Zeee 6000mah on a cube setup and reliably got 12 min of flight on a battery with 159wh/kg.

On the ELRS Mount you may need to mount the antennas, pass through the coax and then connect the UFL connectors.

You can mount the landing gear bumpers on the top plate as well.

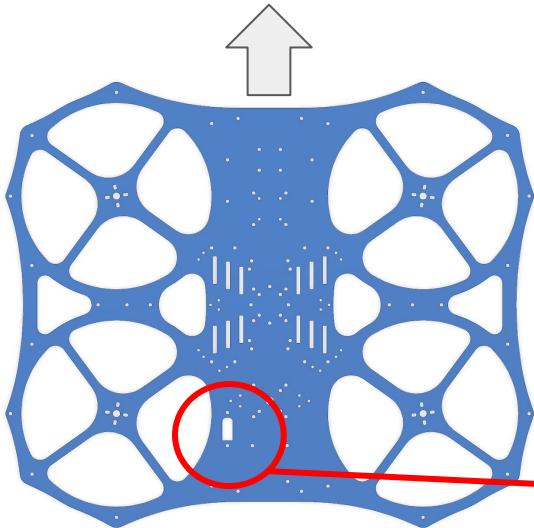
You will may unbolt the B plate for work often. Use a good driver.

The GPS and optical flow can be on the same side, opposite side of the USB.

PETG Prints 4 wall 45% Cubic infill

TPU Prints 2 wall 10% Cubic infill

Right side up



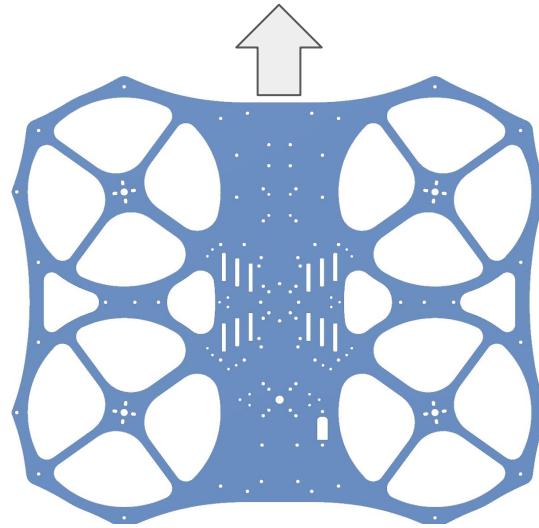
# Orientation

## A Plate (Upper)

Built upside down  
Contains: Motors - Flight Controller - ESC - Power Module - GPS - XT90 Mount

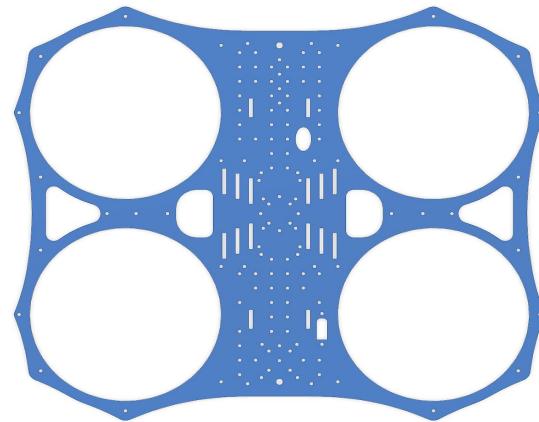
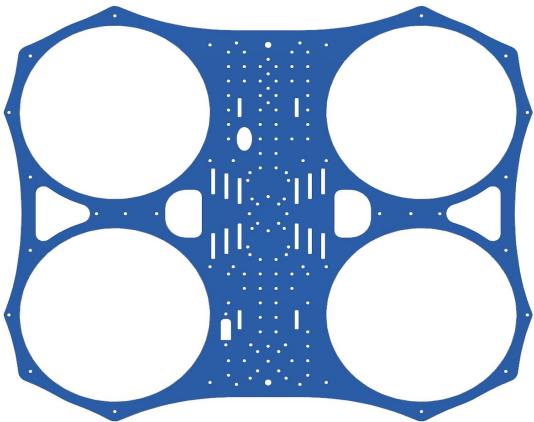
Note: XT90 Mount

Upside Down

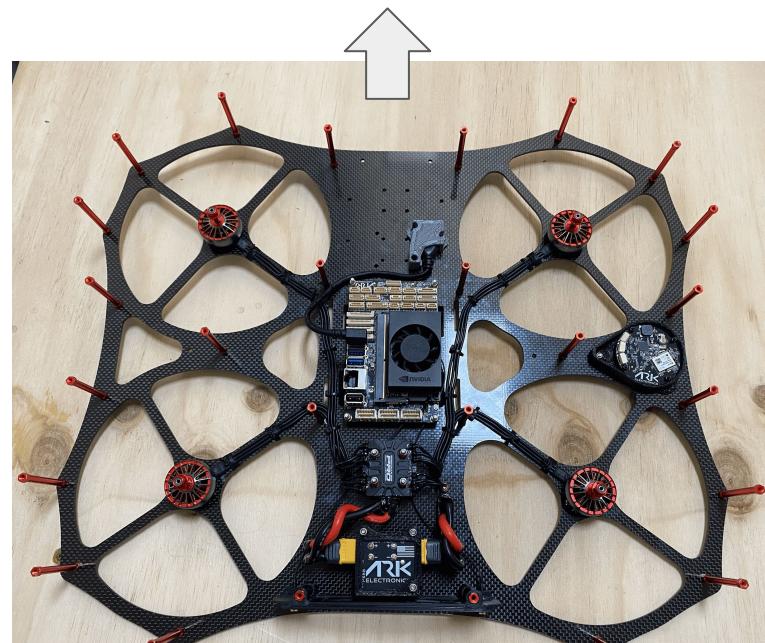
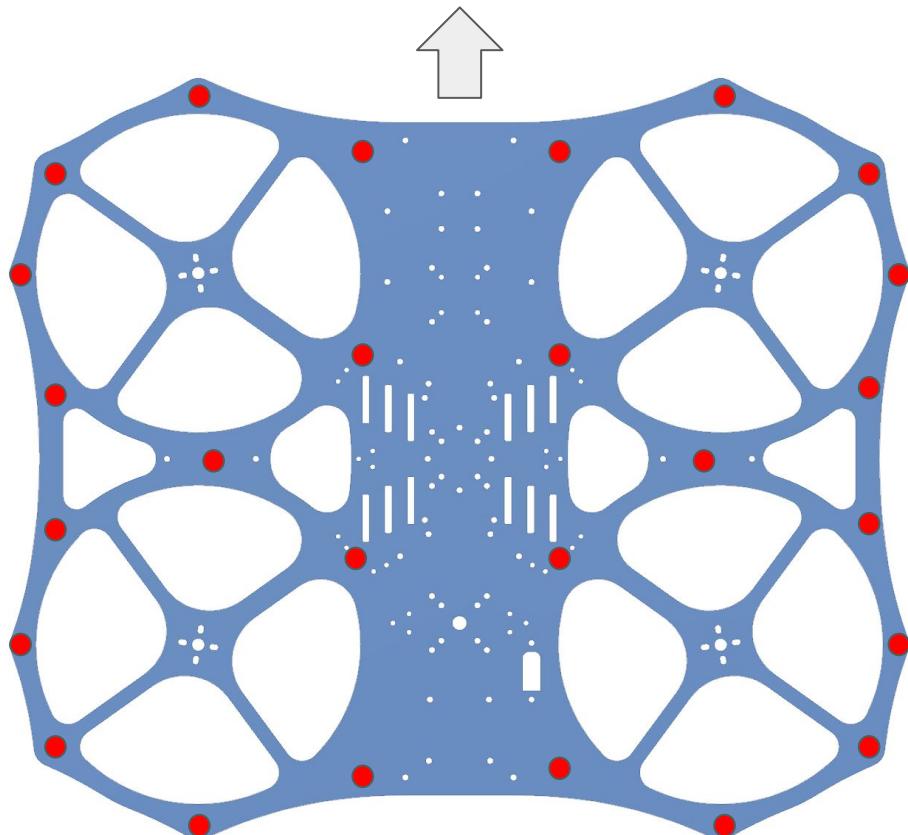


## B Plate (Lower)

Built upside down  
Contains: Optical Flow - Landing Gear

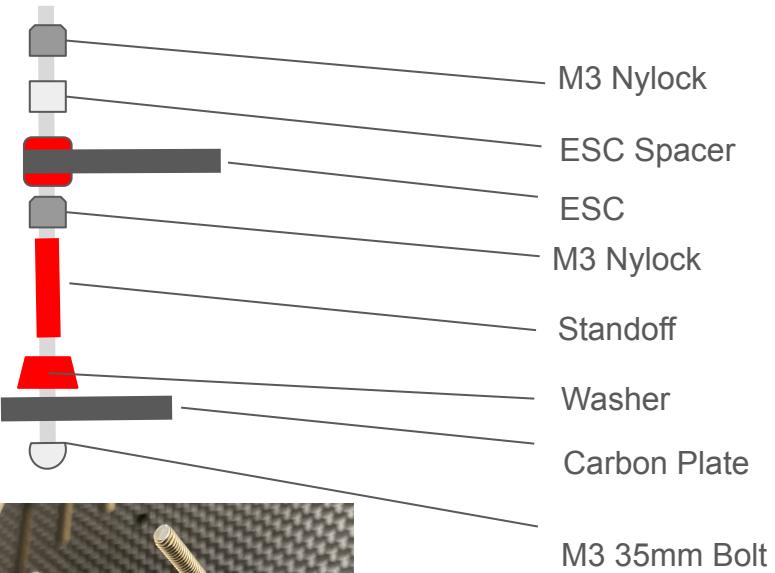


# Standoff Locations

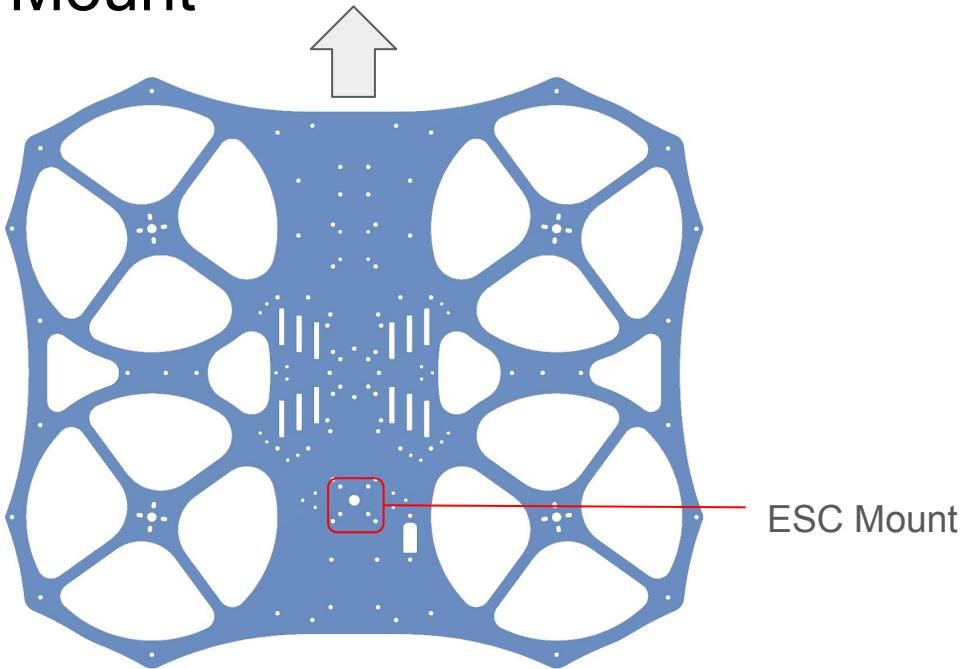


Note: During most of the build the quad will be upside down as shown in both pictures.

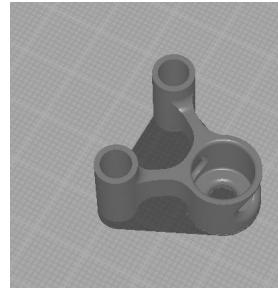
# ESC Mount



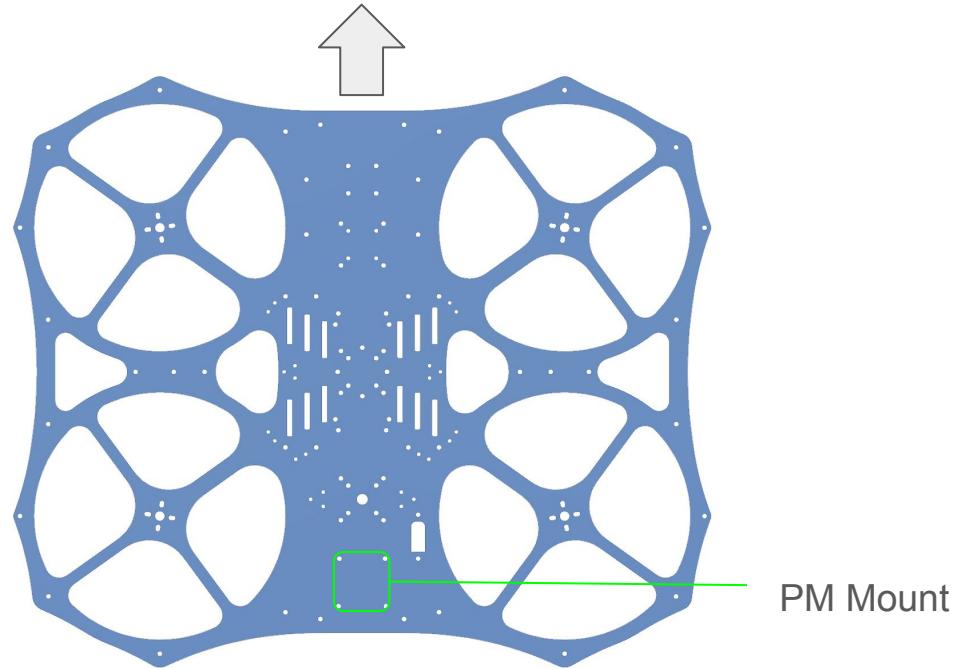
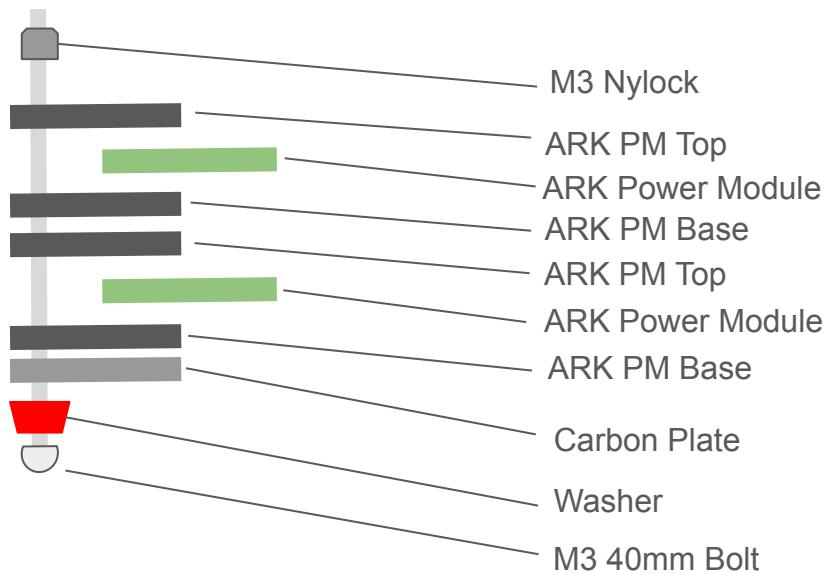
Add "ESC Cap Mount 20x20" to Rear standoffs. Put a small bit of liquid electrical tape, or piece of electrical tape between print and carbon to eliminate vibration.



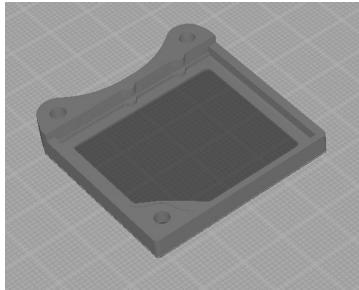
Print:  
ESC Cap Mount 20x20.stl  
PETG



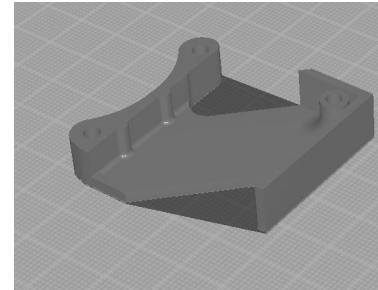
# Power Module Mount



Print:  
ARK PM Base.stl X2  
PETG



Print:  
ARK PM Top.stl X2  
PETG

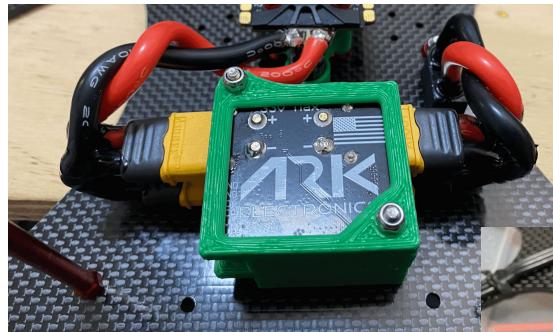


# Leads for Power Module

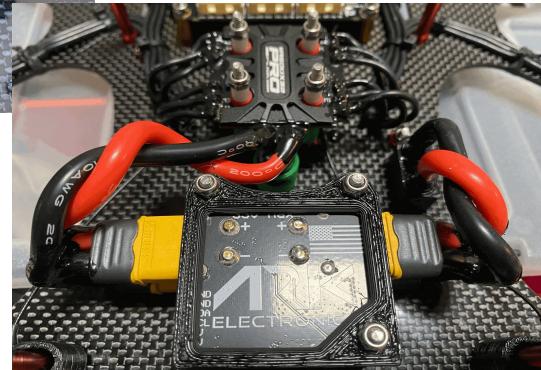
Make two cables like this, for the Male and the Female XT60s, 10AWG.



This is what leads should look like From XT90 to Power Module to ESC.



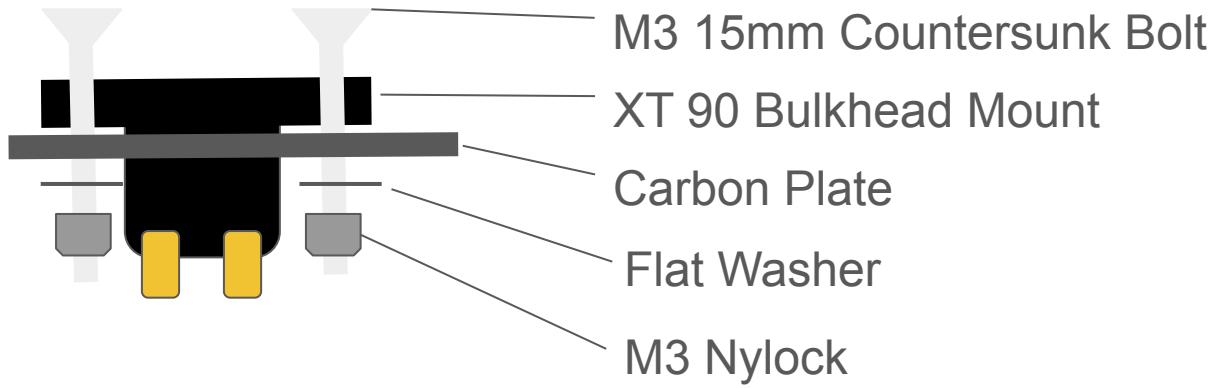
Old Version



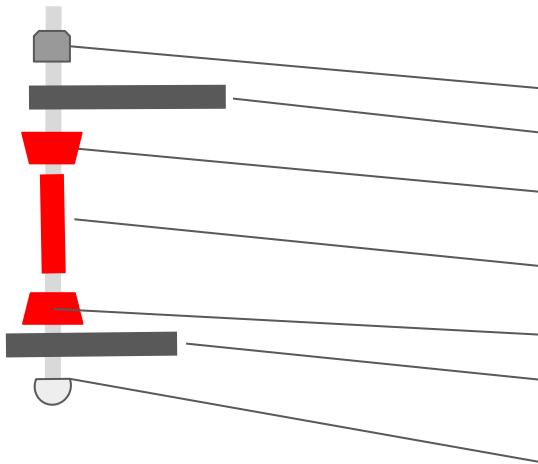
New Version

Note:  
Keep leads tight and  
compact as to not extend into  
the region of the props.

# XT 90 Mount



# Flight Controller MOUNT



M3 Nylock

Flight Controller

Washer

Standoff

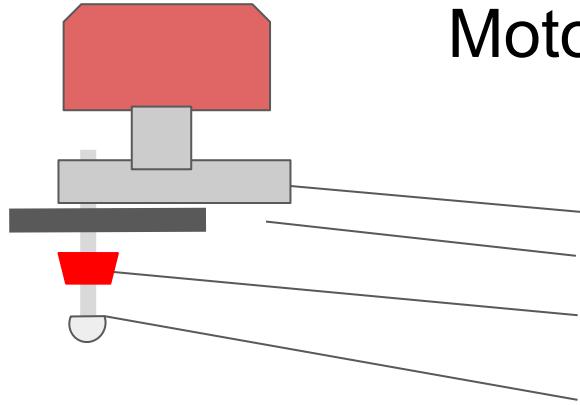
Washer

Carbon Plate

M3 25mm Bolt

Optionally for USB clearance the washers can be omitted. Or optionally add decorative washer above flight controller before nylock.

# Motor Mounts



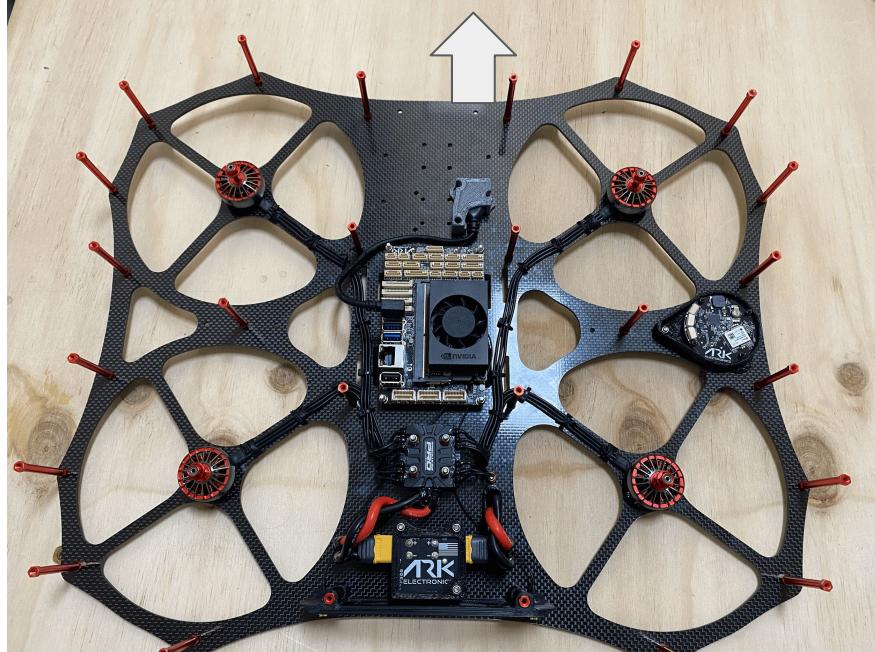
Motor

Carbon

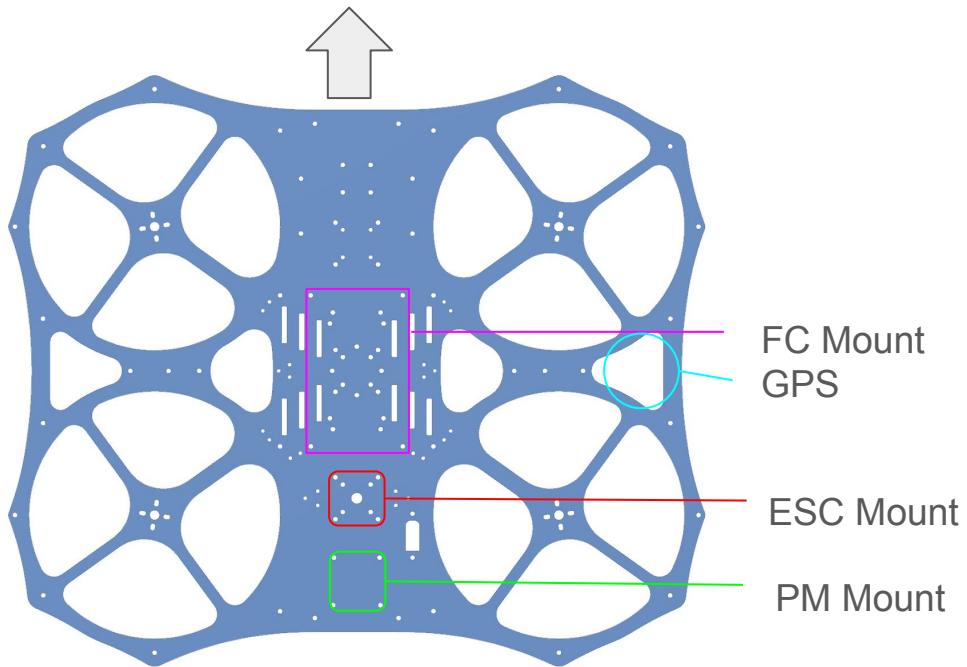
Washer

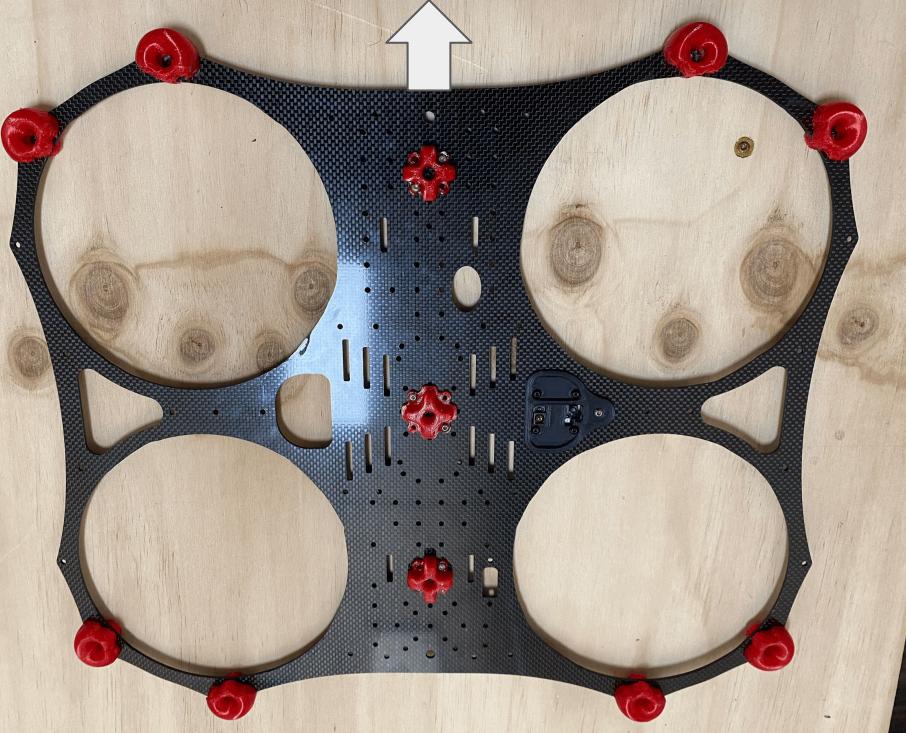
M3 8mm Bolt ( in motor package)

Note: Use threadlock

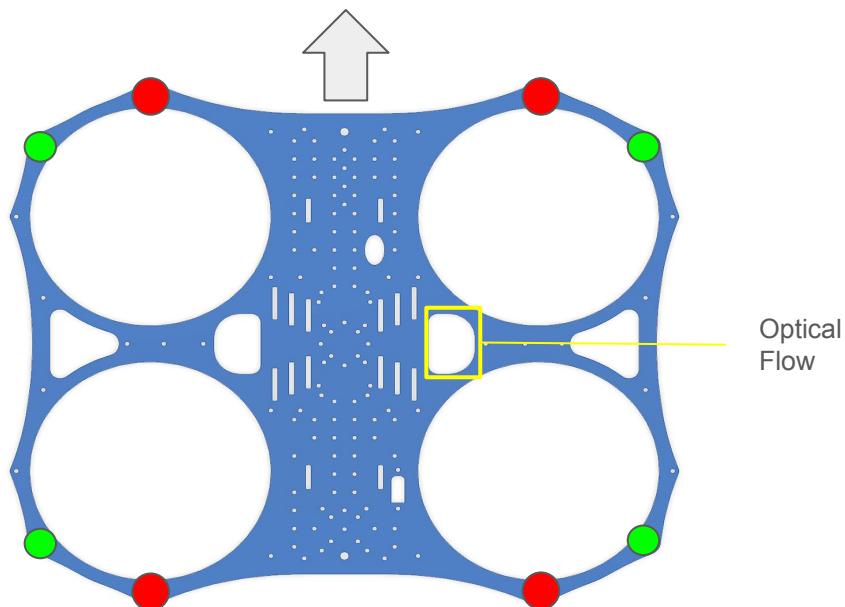


A Plate Construction (This is upside down as shown)





B Plate Construction (This is upside down as shown)



- Landing Gear Front/Back
- Landing Gear Corner