Building a Swarmie

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# Chassis Assembly

The following is needed for chassis construction.

Tools:

* Phillips screw driver. – M3x6mm screws
* 2mm hex key. – M3x4mm screws

Parts:

* 16 M3x6mm (black) screws. – Packaged with the chassis kit.
* 8 M3x4mm (black) screws.
* 2 pairs of black brackets. – Packaged with the chassis kit.
* 4 DC motors.
* Laser cut bottom plate.
* 3D printed battery base.
* 3D printed battery brace.
* 3D printed battery cross strap.

## Brackets

Using eight M3x6mm screws, attach all four brackets together as seen below.

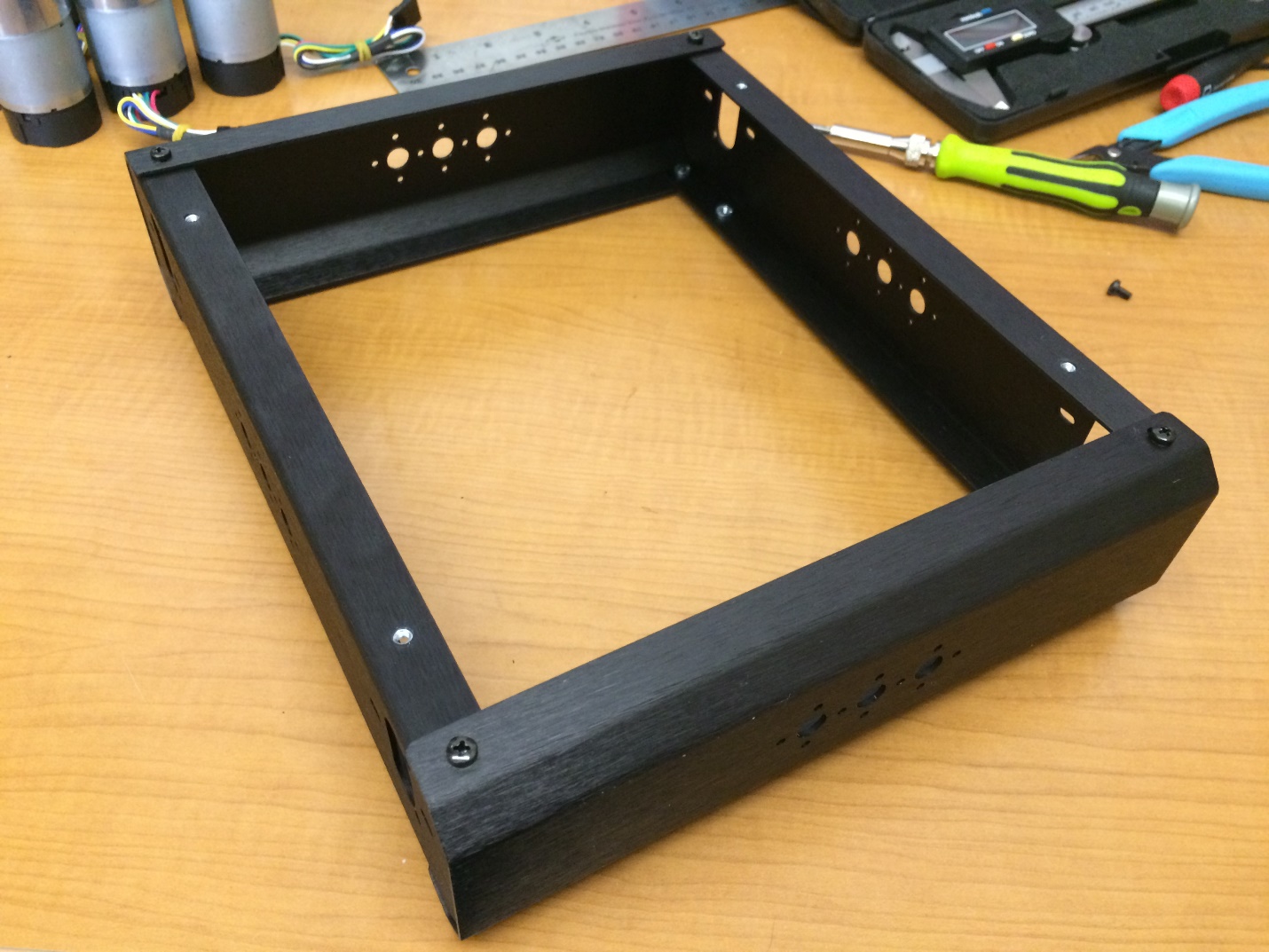


Figure : Chassis brackets fully attached

## Motors

Attach motors to mounting holes using two M3x4mm screws per motor. The motor shaft should be towards the bottom of the chassis. See below for detail.

[Picture of close-up motor inside chassis]

[Picture of all four motors attached in chassis]

## Wheel Assembly

[Adapt Lynxmotion instructions]

## Bottom Plate

[Write about attaching battery base and battery]

[Waiting for newest version]

# Top Plate Assembly

[Tools list]

[Parts list]

[This section includes instructions to attach all 3D printed parts to the top plate as well as electronics (ie. PCB, US, IMU, GPS, switch, buses, NUC, camera)]

[Waiting for newest version of the top plate]

## 3D Printed Parts

## Ultrasounds, Camera, IMU, GPS

## PCB, Switch, and Bus Connections

## Cover Plate Assembly and Attachment

[Current version of the cover plate is in stock]

# Fully Assembled

[Include information about and pictures of the fully assembled Swarmie]