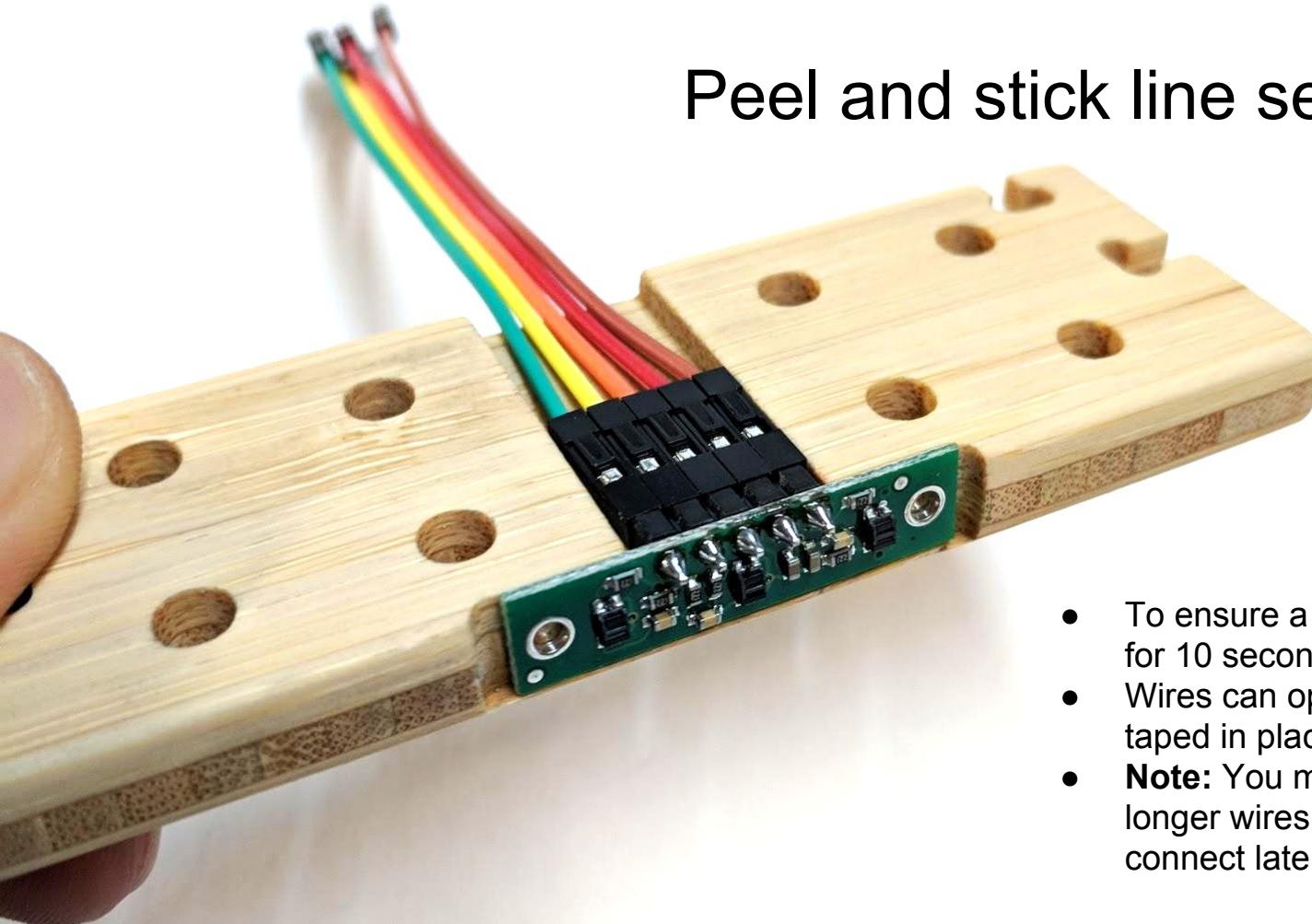


# Bambot Assembly

01 June 2018

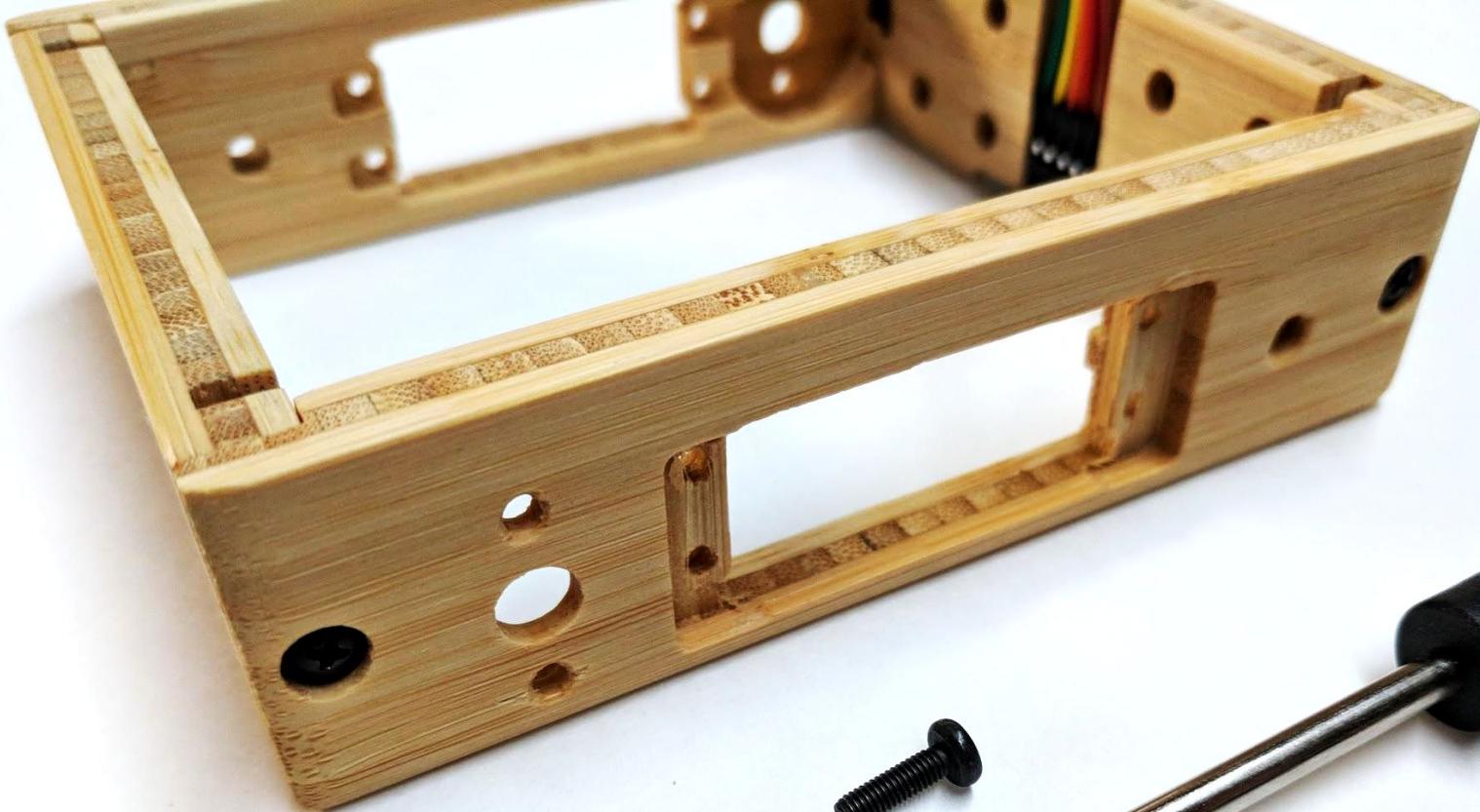
# Peel and stick line sensor

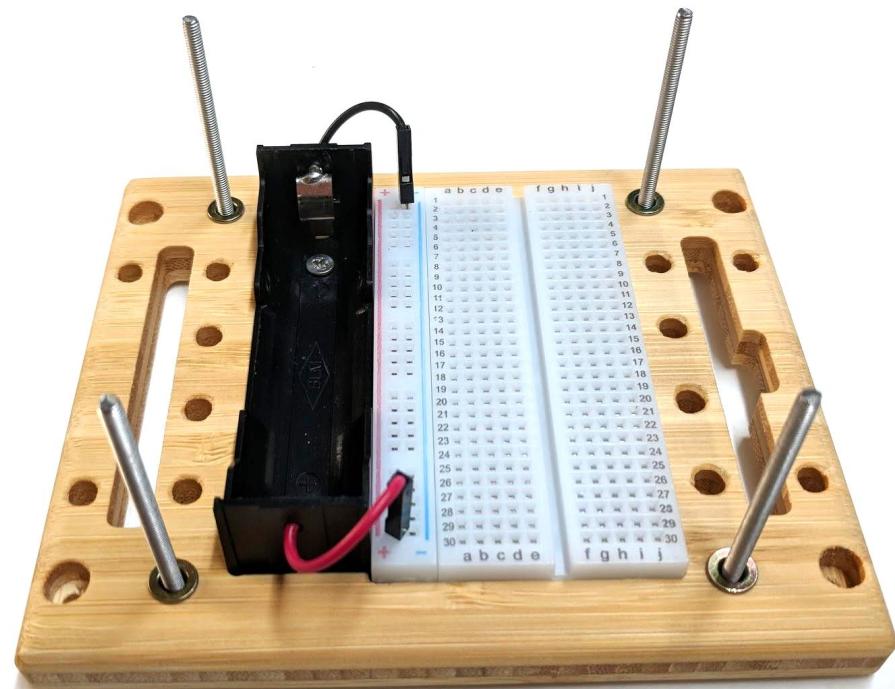
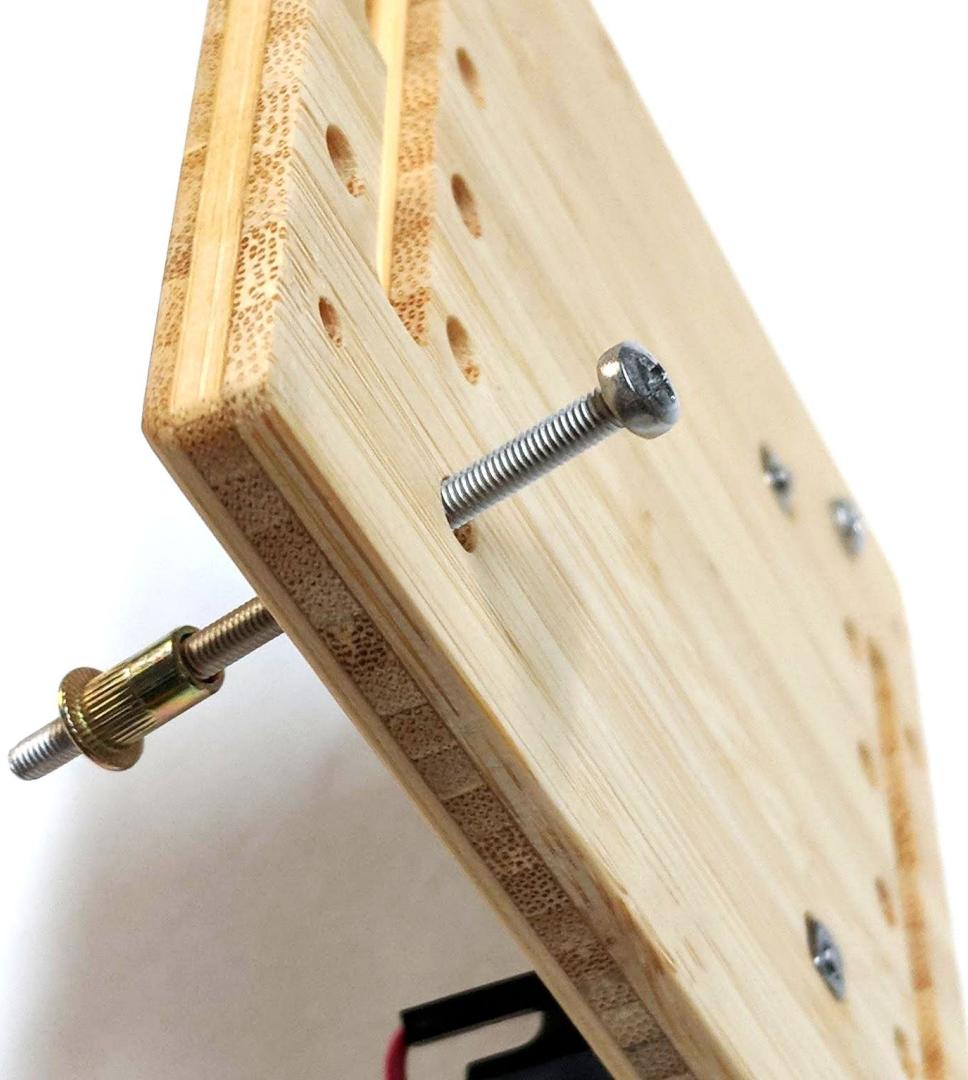


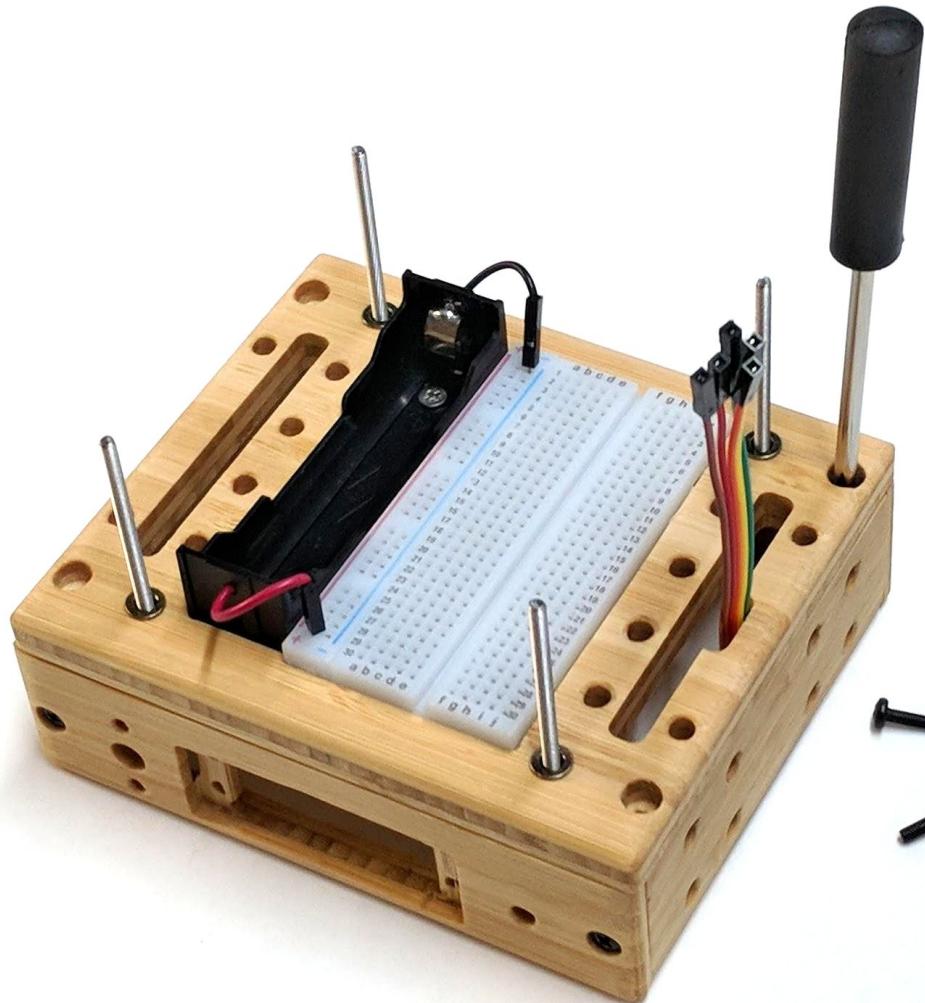
- To ensure a strong bond, hold firmly for 10 seconds.
- Wires can optionally be glued or taped in place.
- **Note:** You may prefer to use the longer wires so it will be easier to connect later.

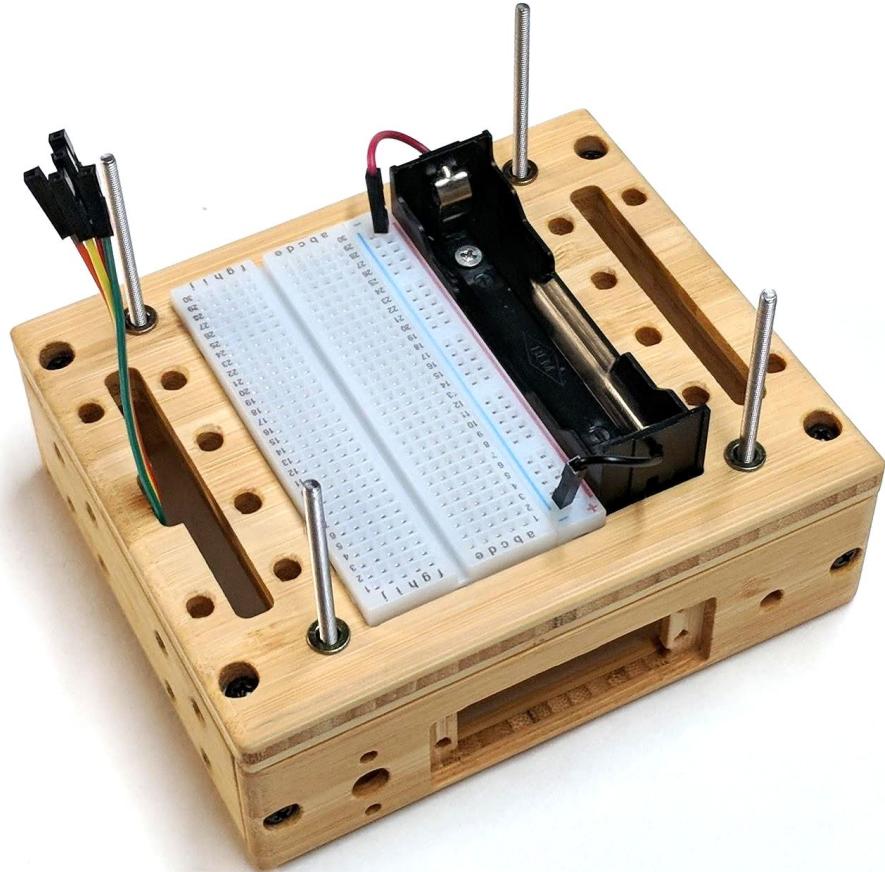
Insert square nuts



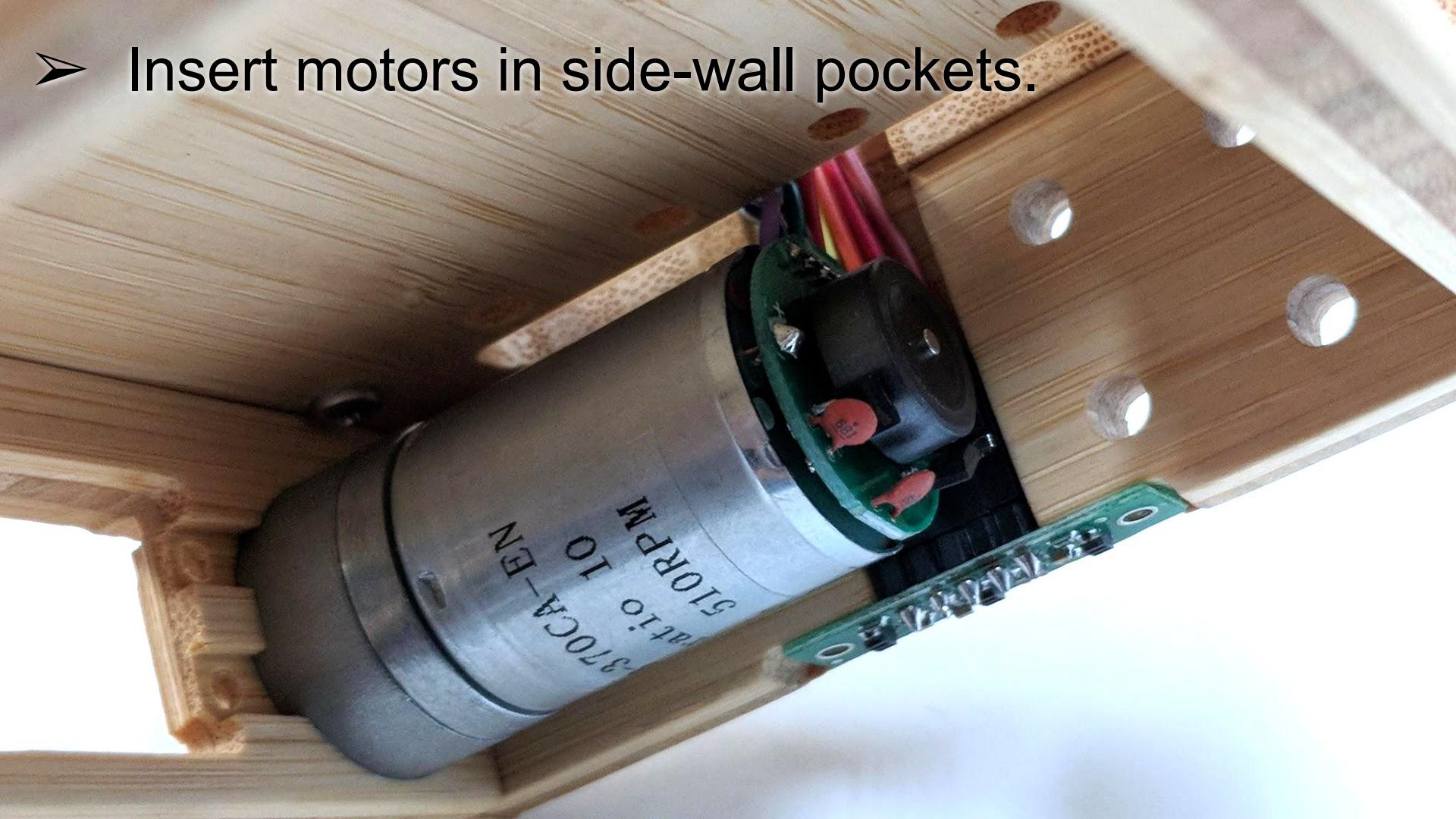




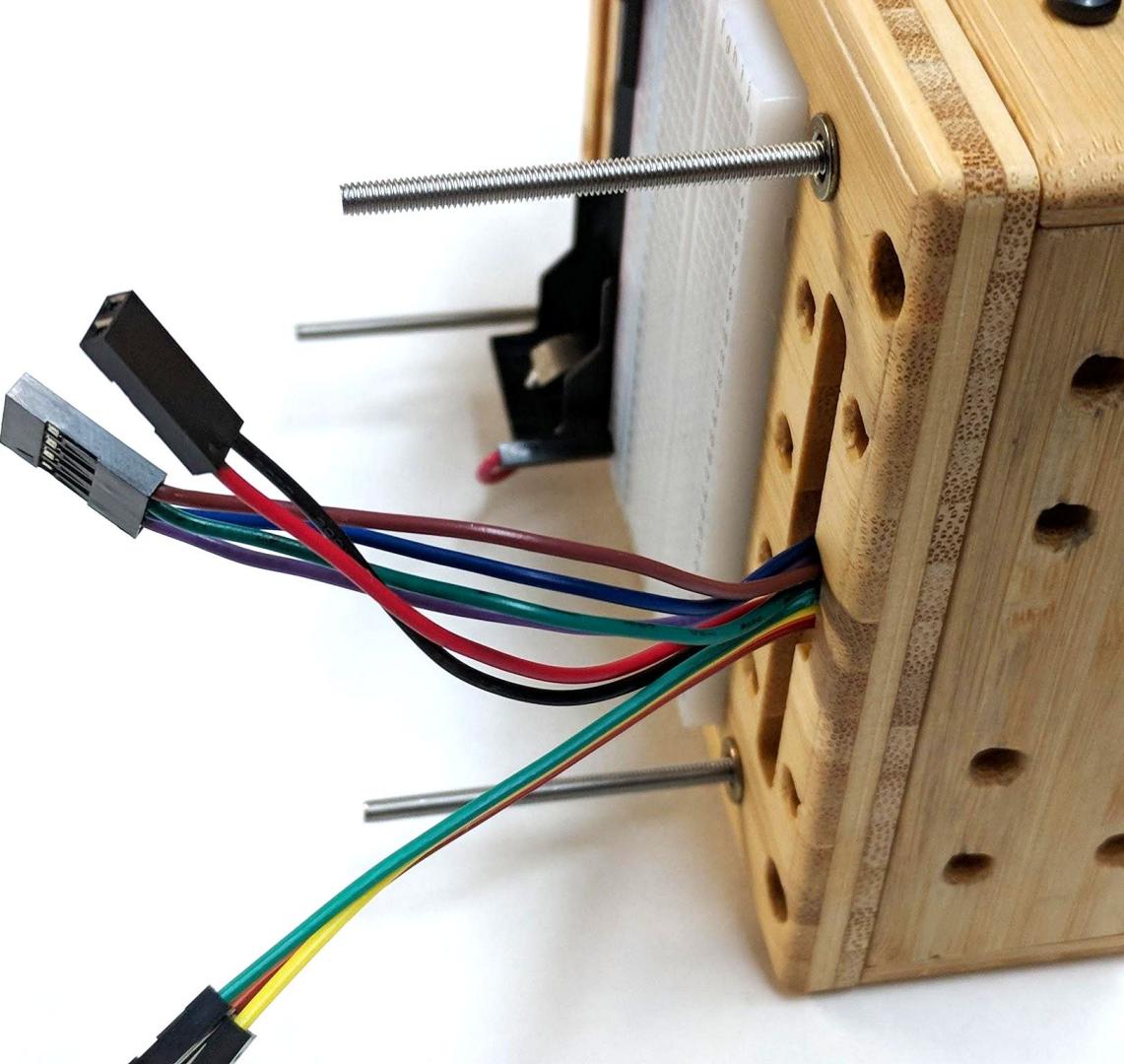




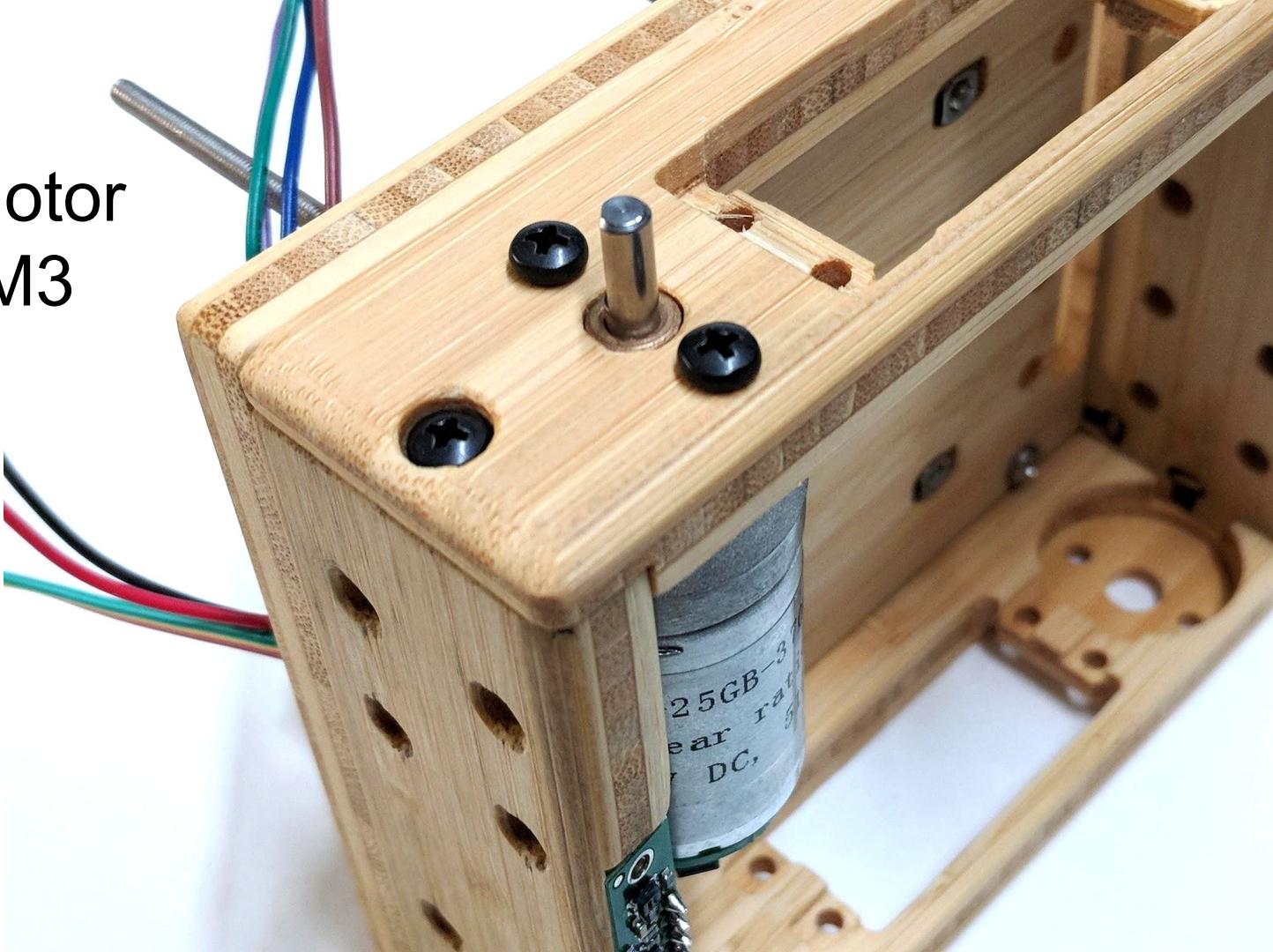
- Insert motors in side-wall pockets.



- Pass wires through slot.

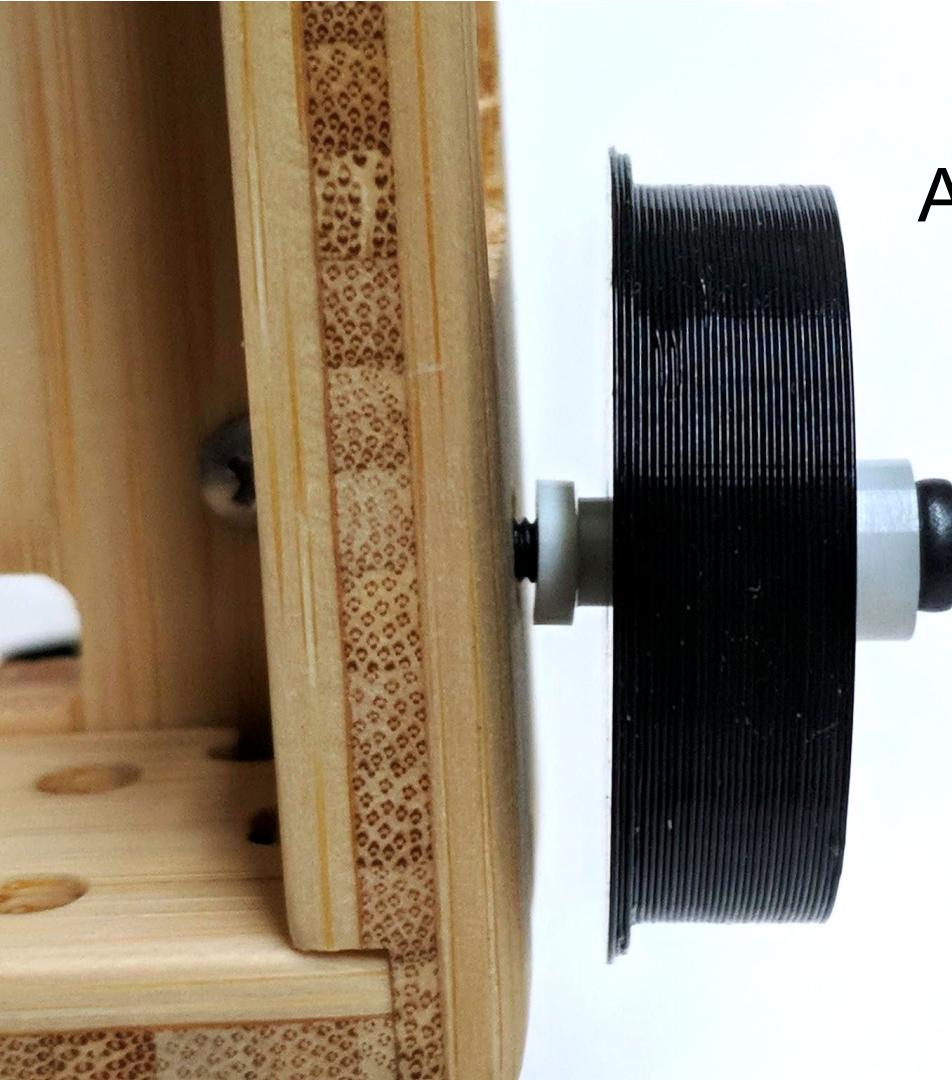


- Secure motor with two M3 machine screws.



- Insert rivet nuts for idlers on side plates.





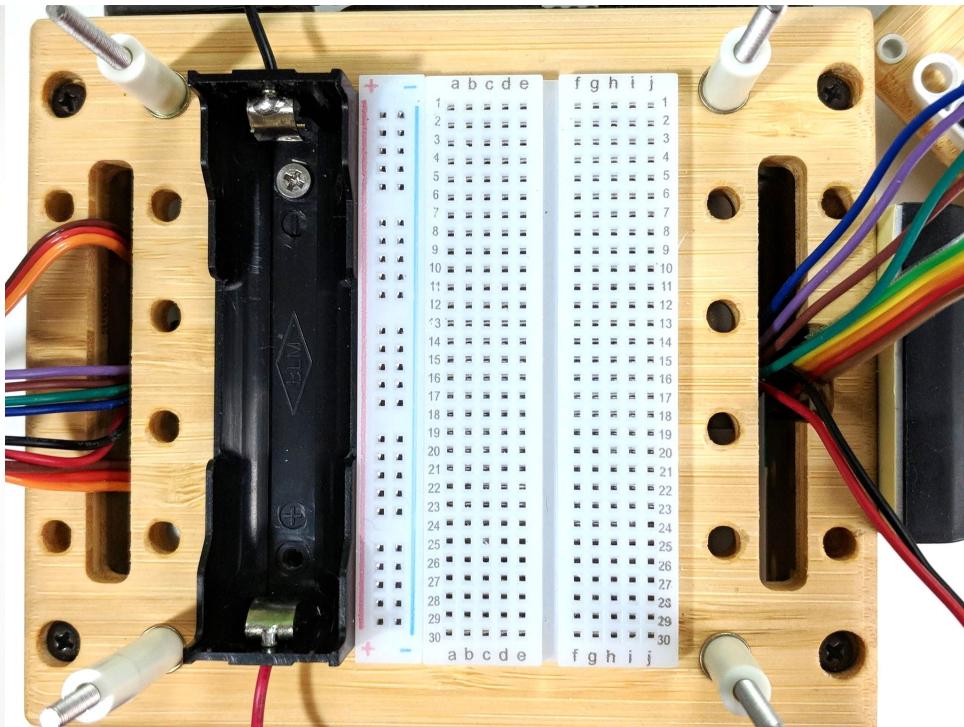
Assemble and install idlers.

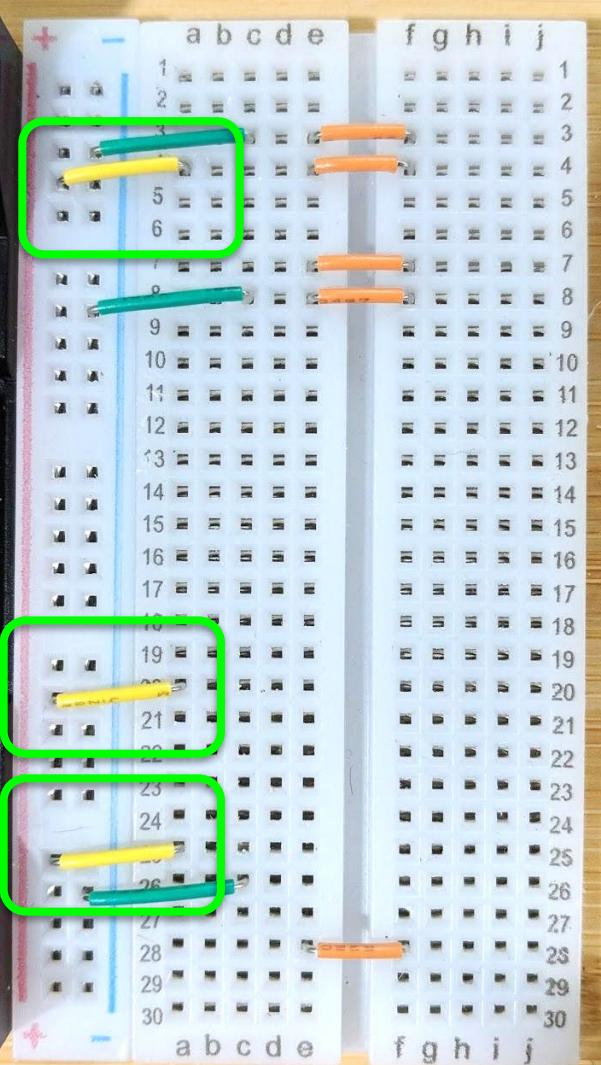
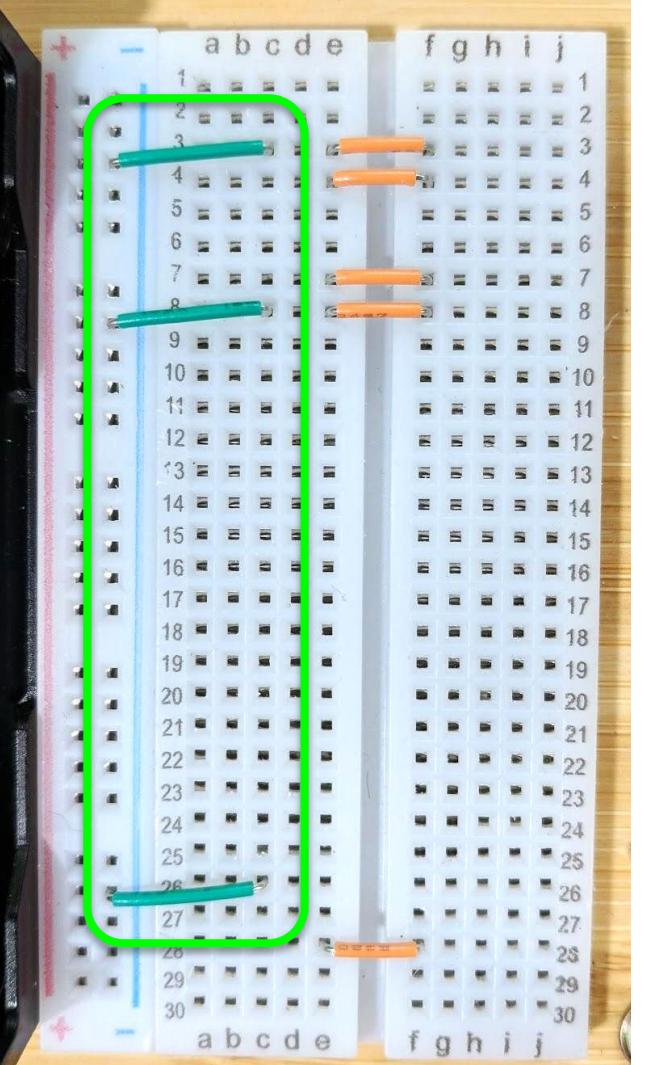
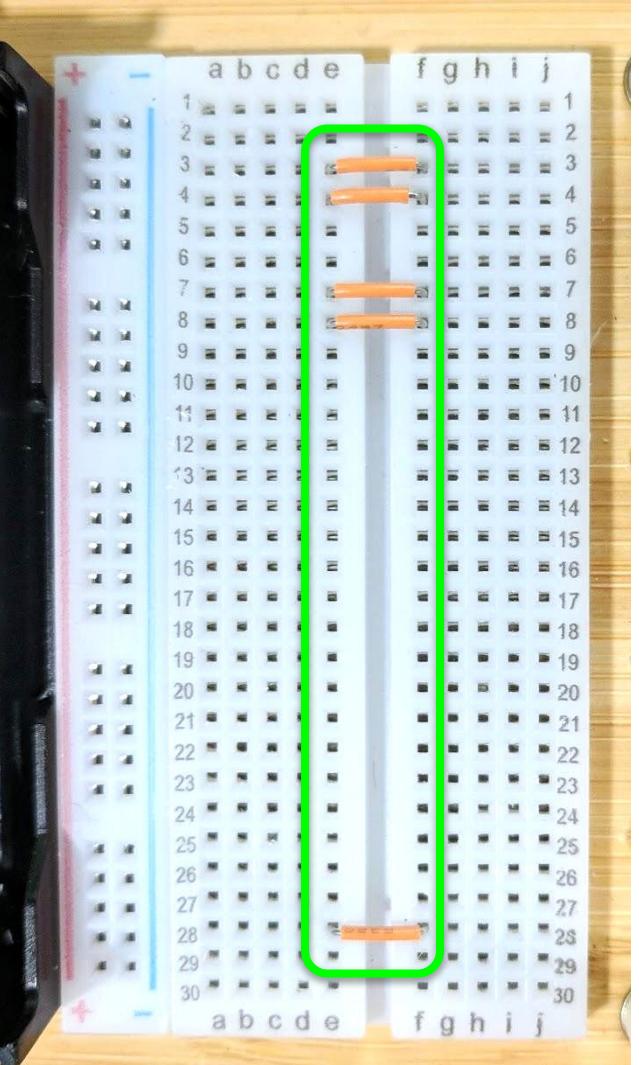


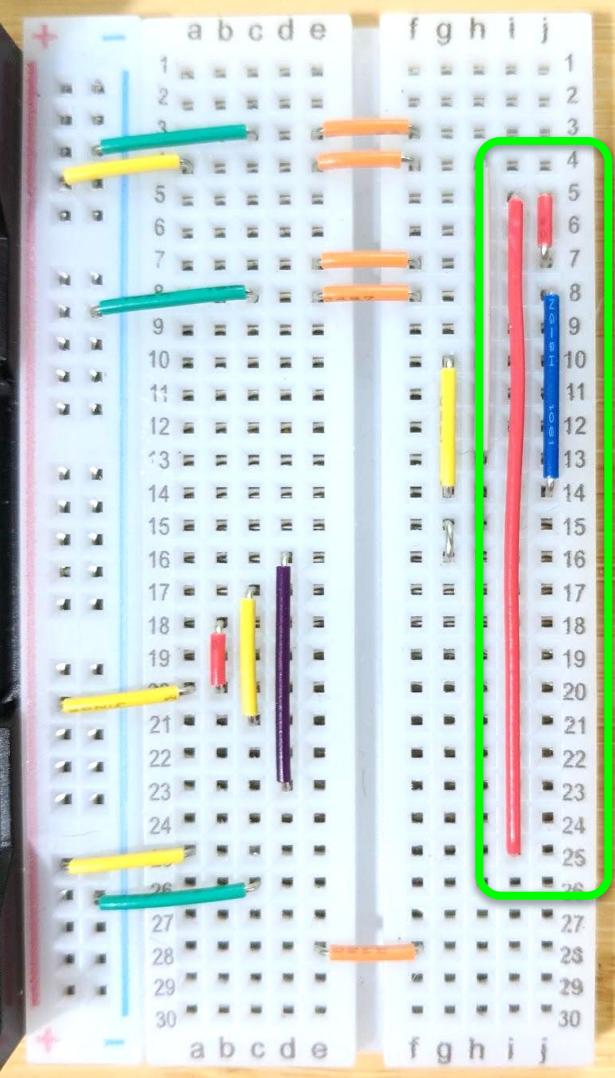
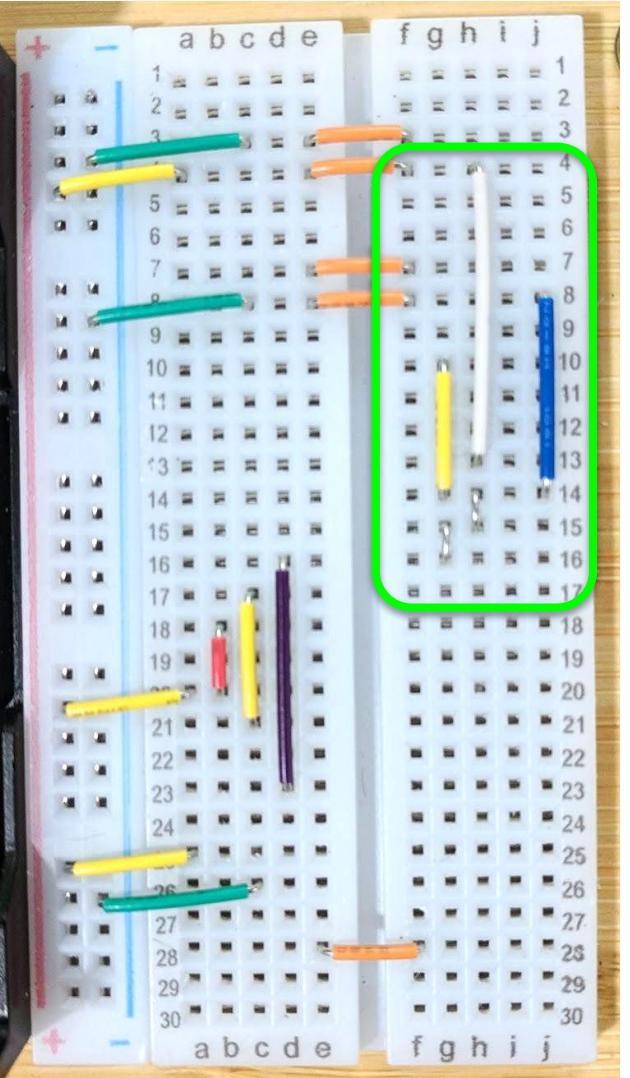
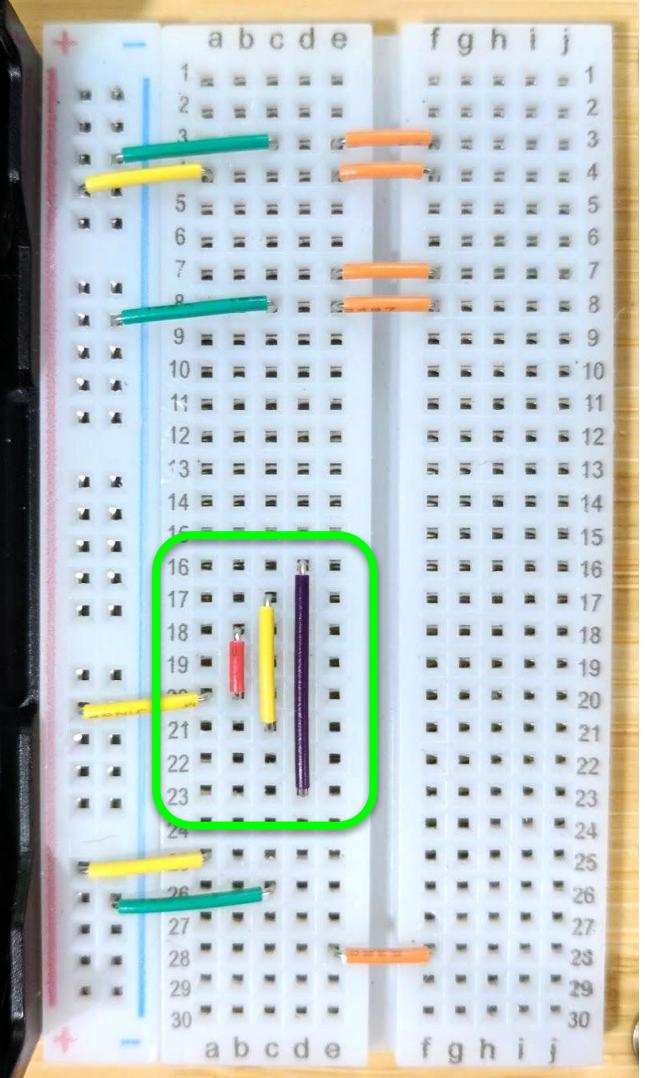


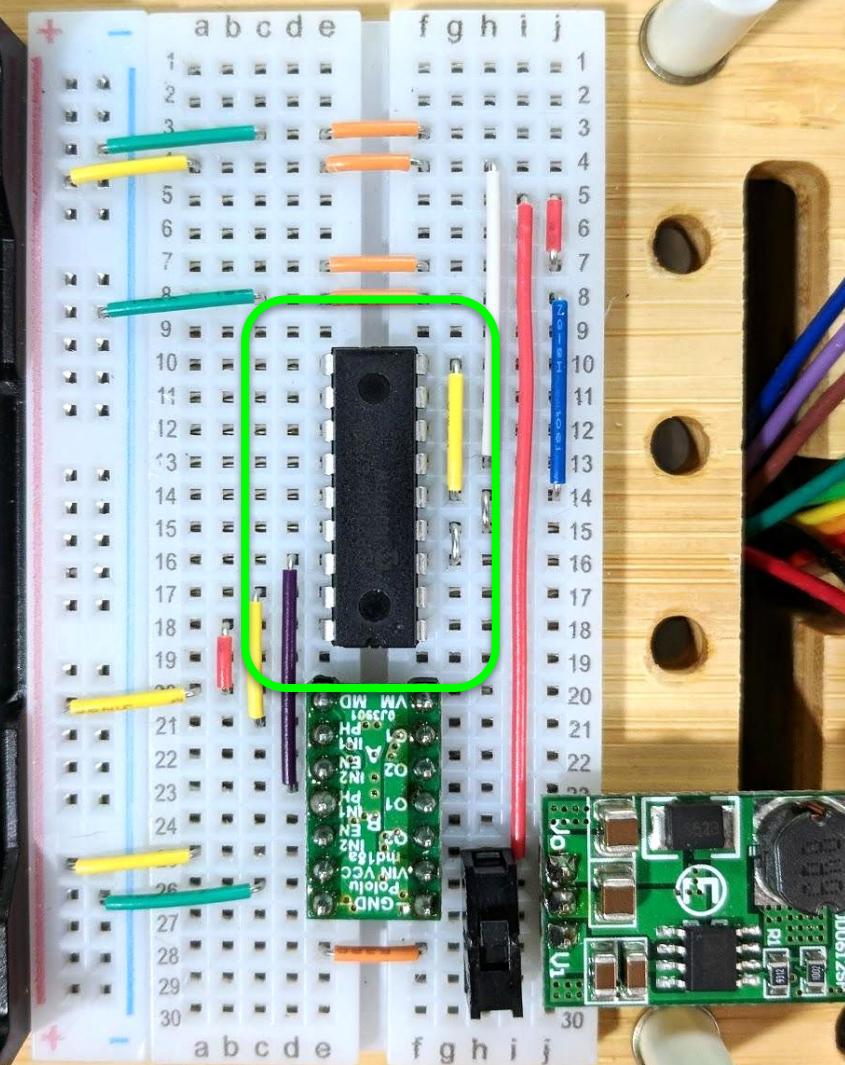
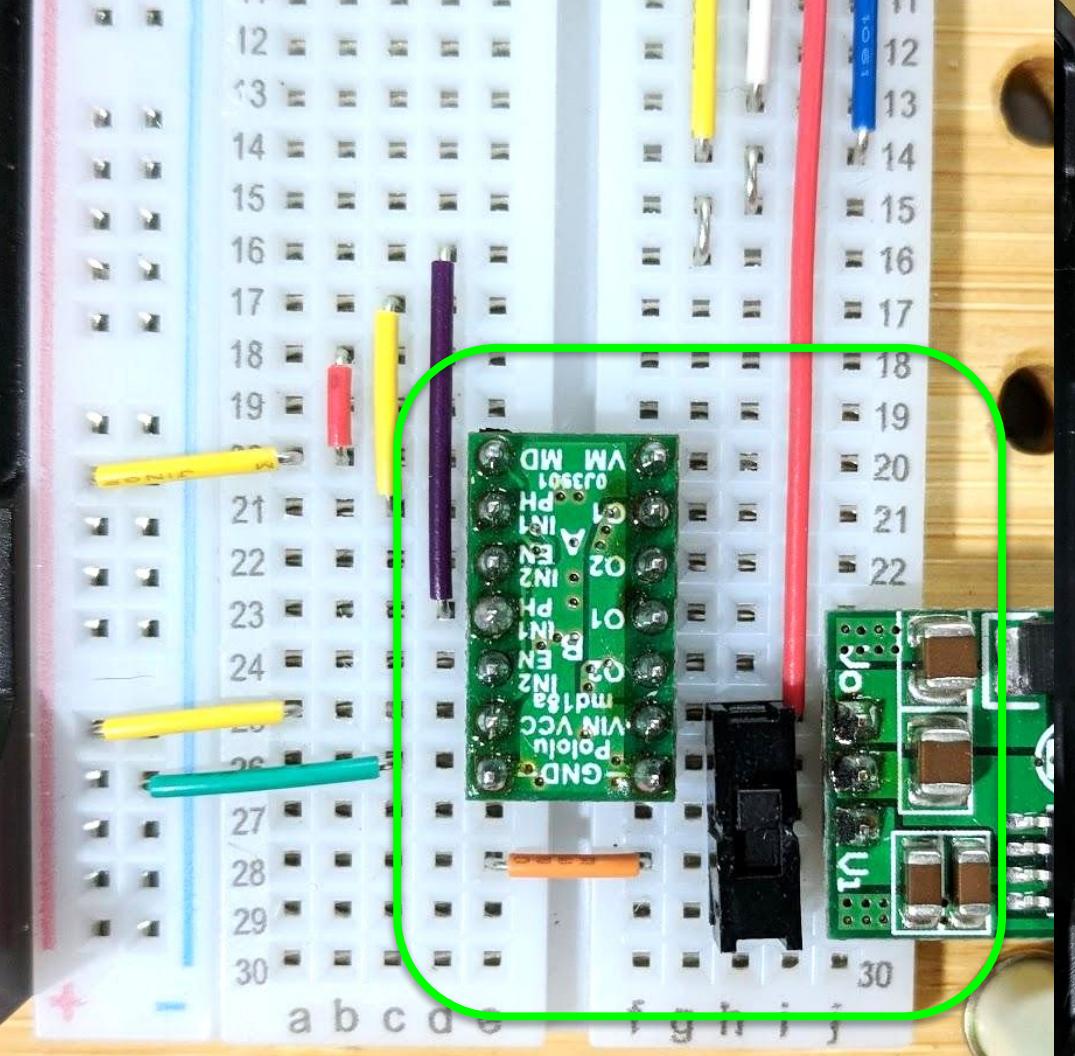
- Press belt pulley onto motor shaft.
- Put belt in position.
- Secure belt with threaded idler cap.

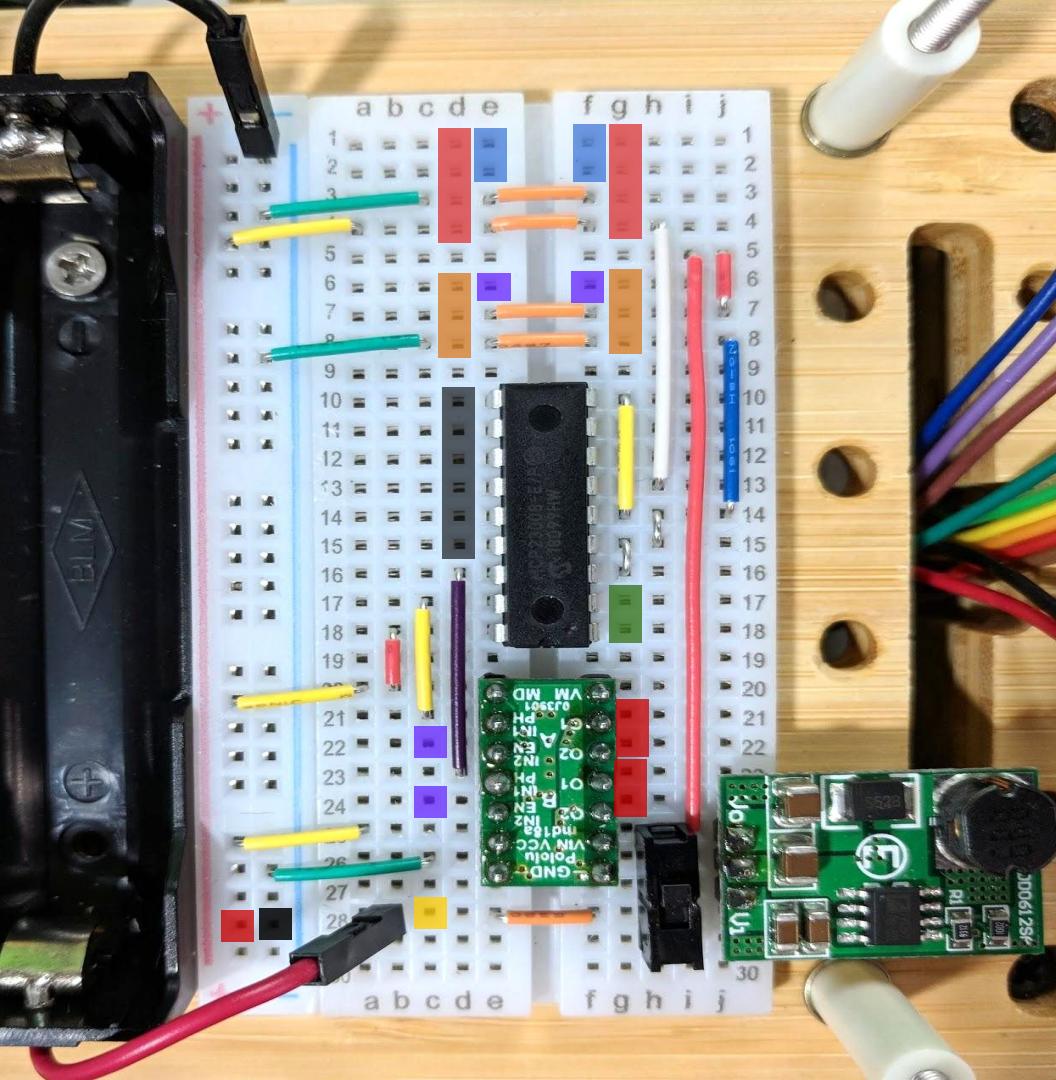
Install jumpers carefully as shown in the next four slides BEFORE you insert the battery!!











Motor encoders (+5, G, A, B)

Servos (G, +6, Signal)

Motor encoder data pins

PWM pins on M5Stack

I2C Pins (SDA, SCL) on M5Stack

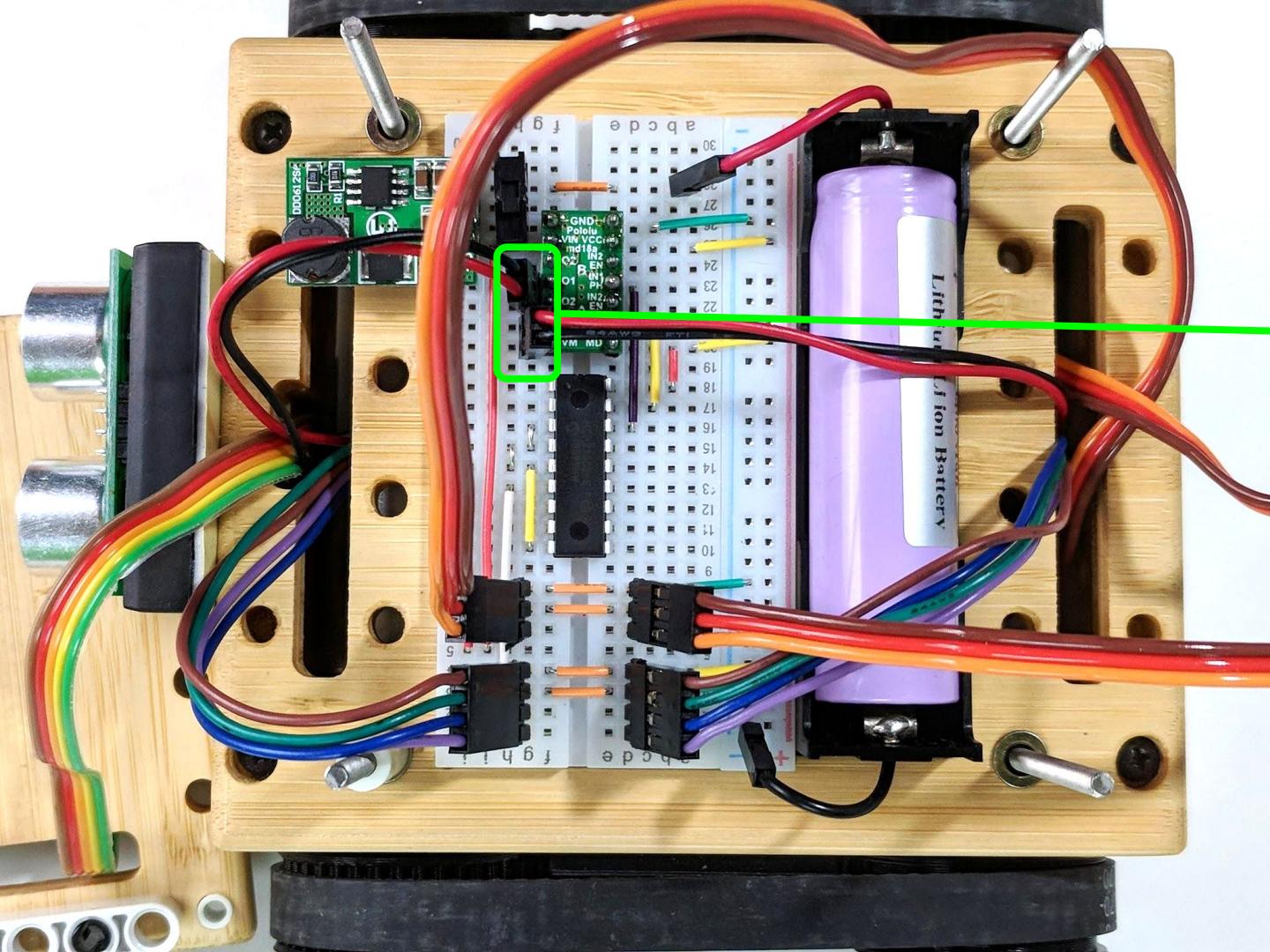
Digital I/O

Motor Power (Red/Black)

BAT on M5Stack

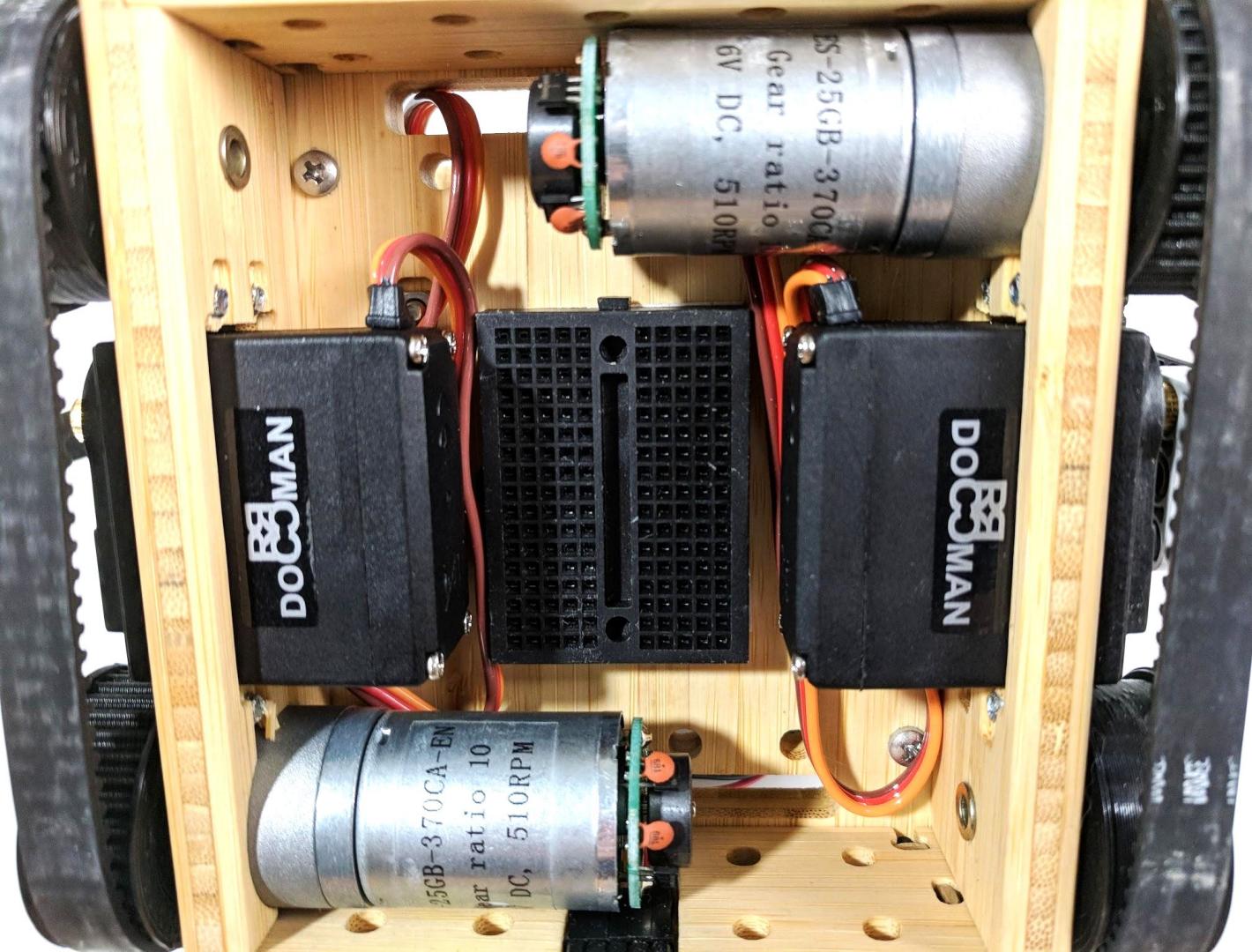
G on M5Stack

5V on M5Stack

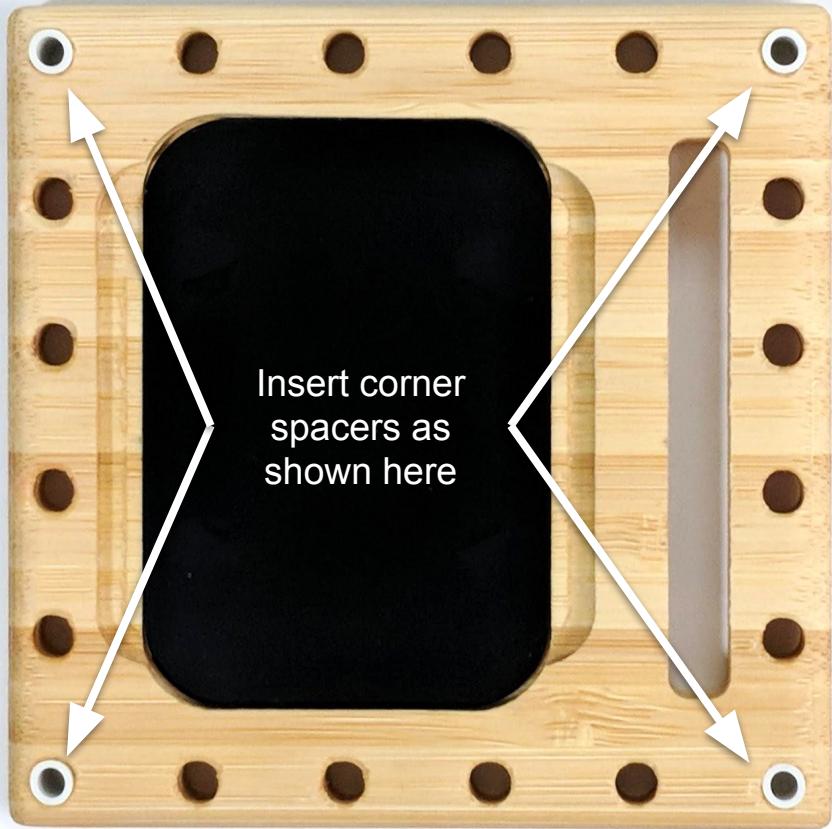


Off by 1 error :-(

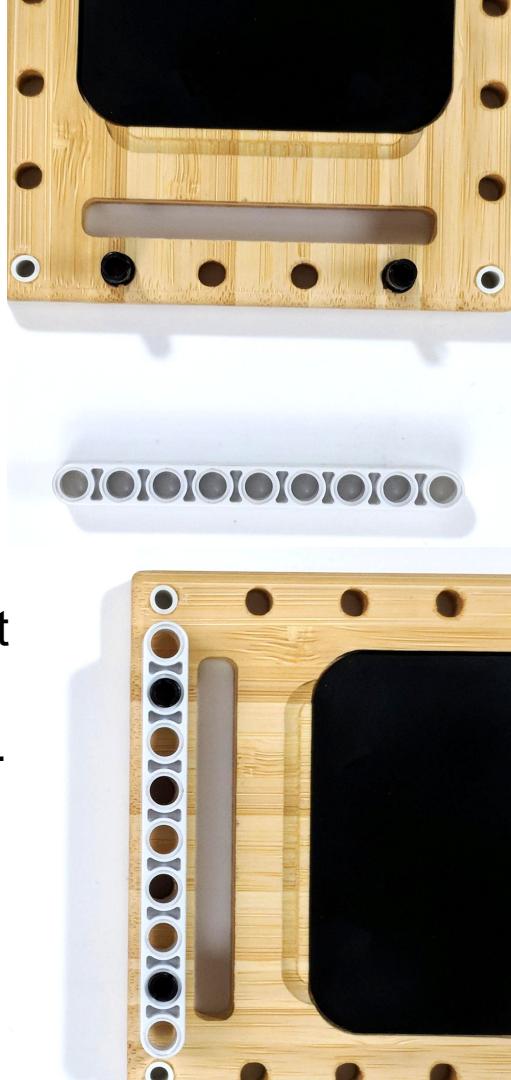
Take your time and  
double check your wiring  
unless you love  
troubleshooting ;-)

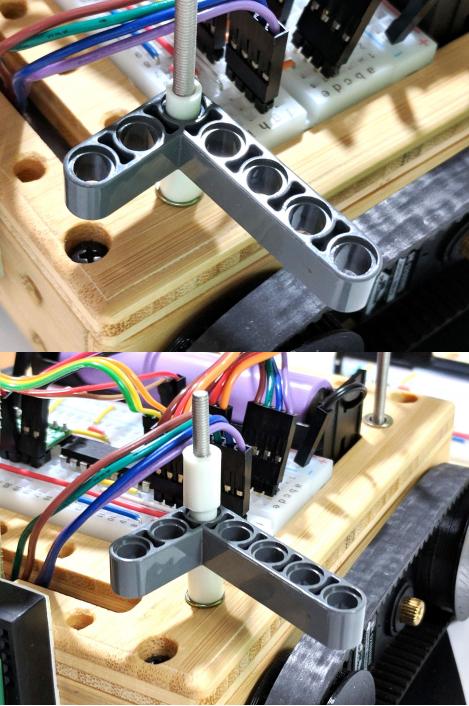
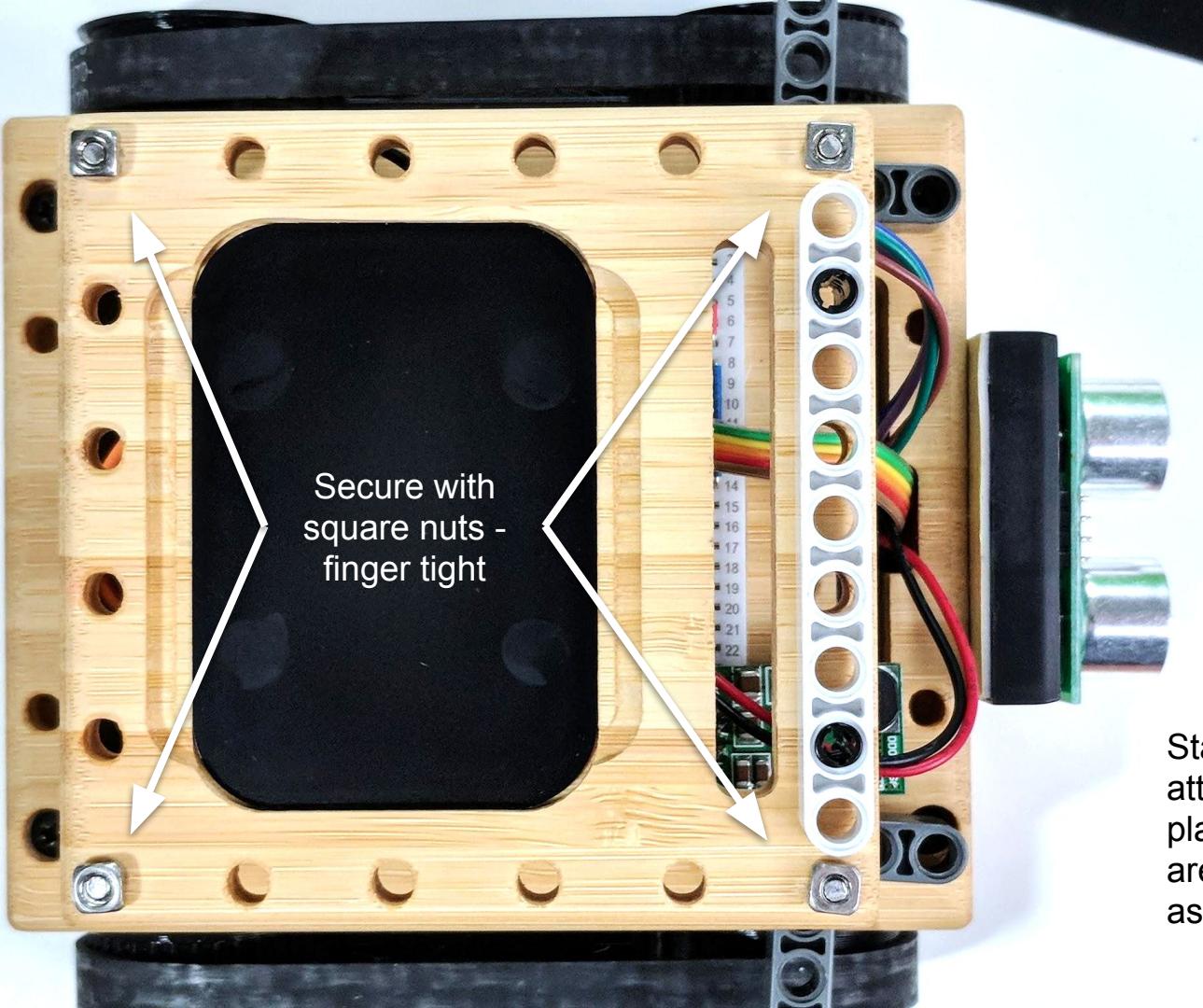


You can tuck the excess servo wire neatly under (okay technically above) the servos like this.

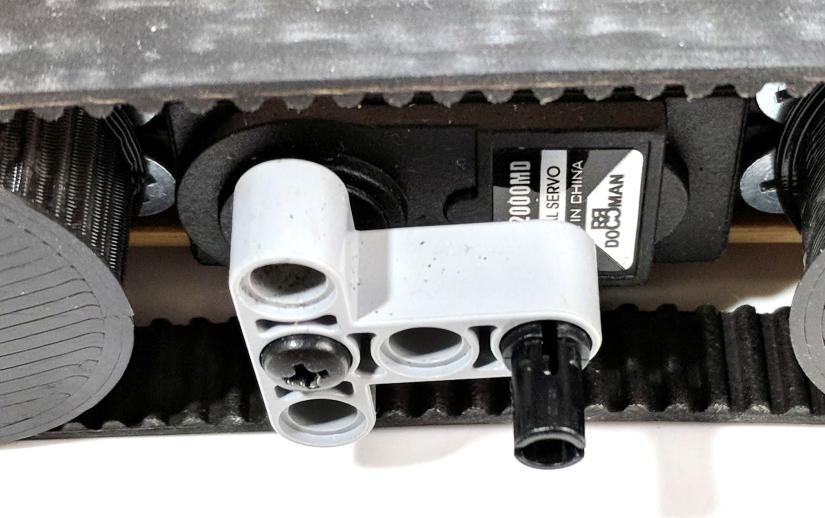


Your Bambot  
is Lego  
compatible...





Stack spacers before attaching M5Stack mounting plate. The narrow spacers are designed to work nicely as pivots for Lego parts.



Lego parts can  
optionally be attached  
to servo with 10mm M3  
screws as shown here.



This provides an optional  
building foundation for  
Lego arms and other  
manipulators.

