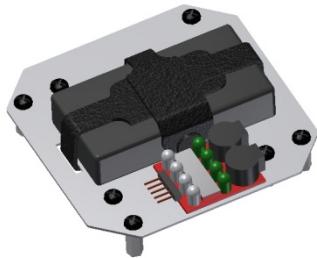


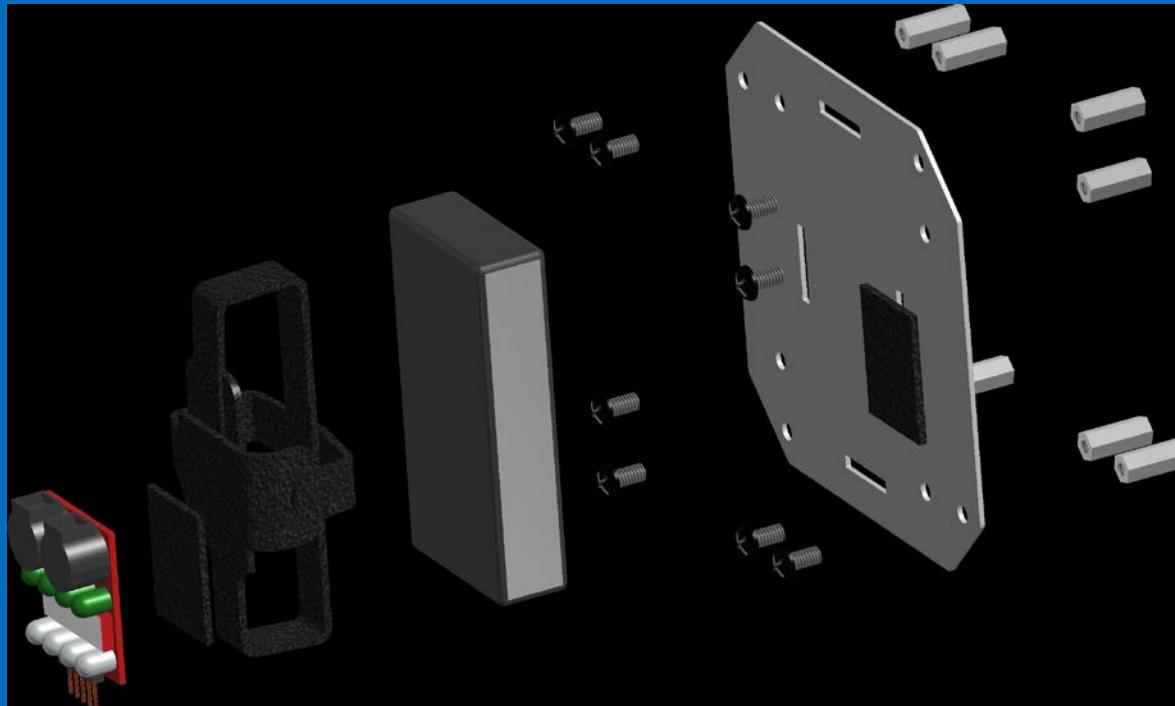
Session Three

Assembly

Robotics Week Instructor
Joy Shetler, PhD



Assemble Power Pack



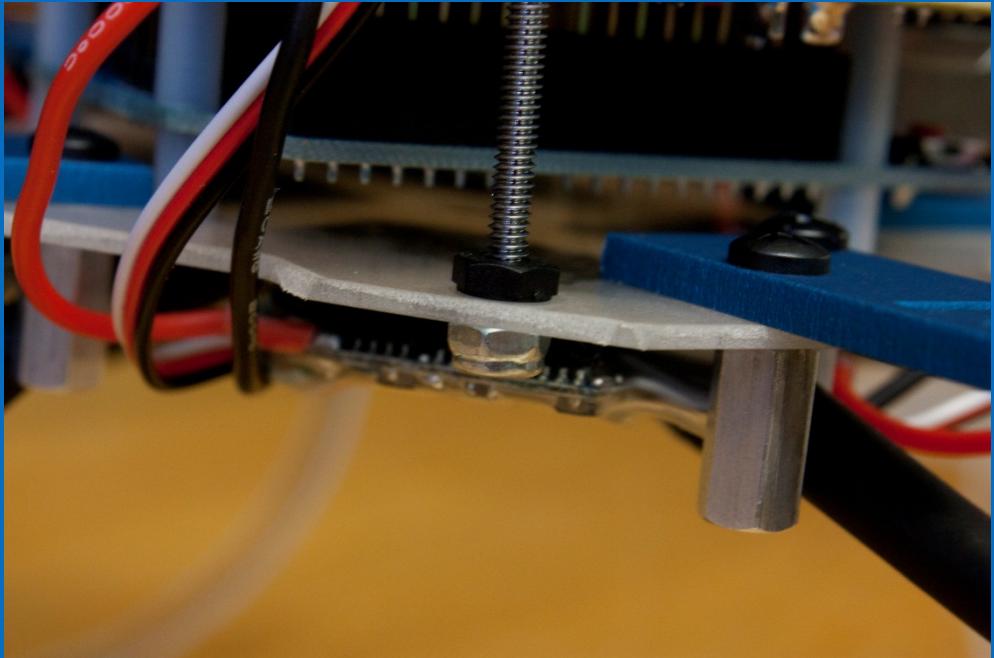
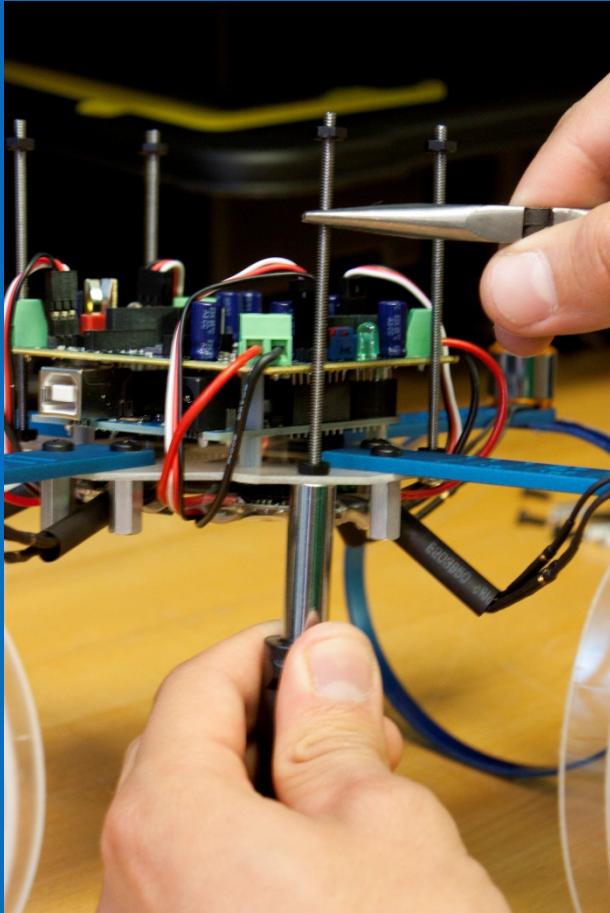
Locate Tools & Parts For Crash Protection Plate



Prepare Crash Protection Plate Mounting Studs



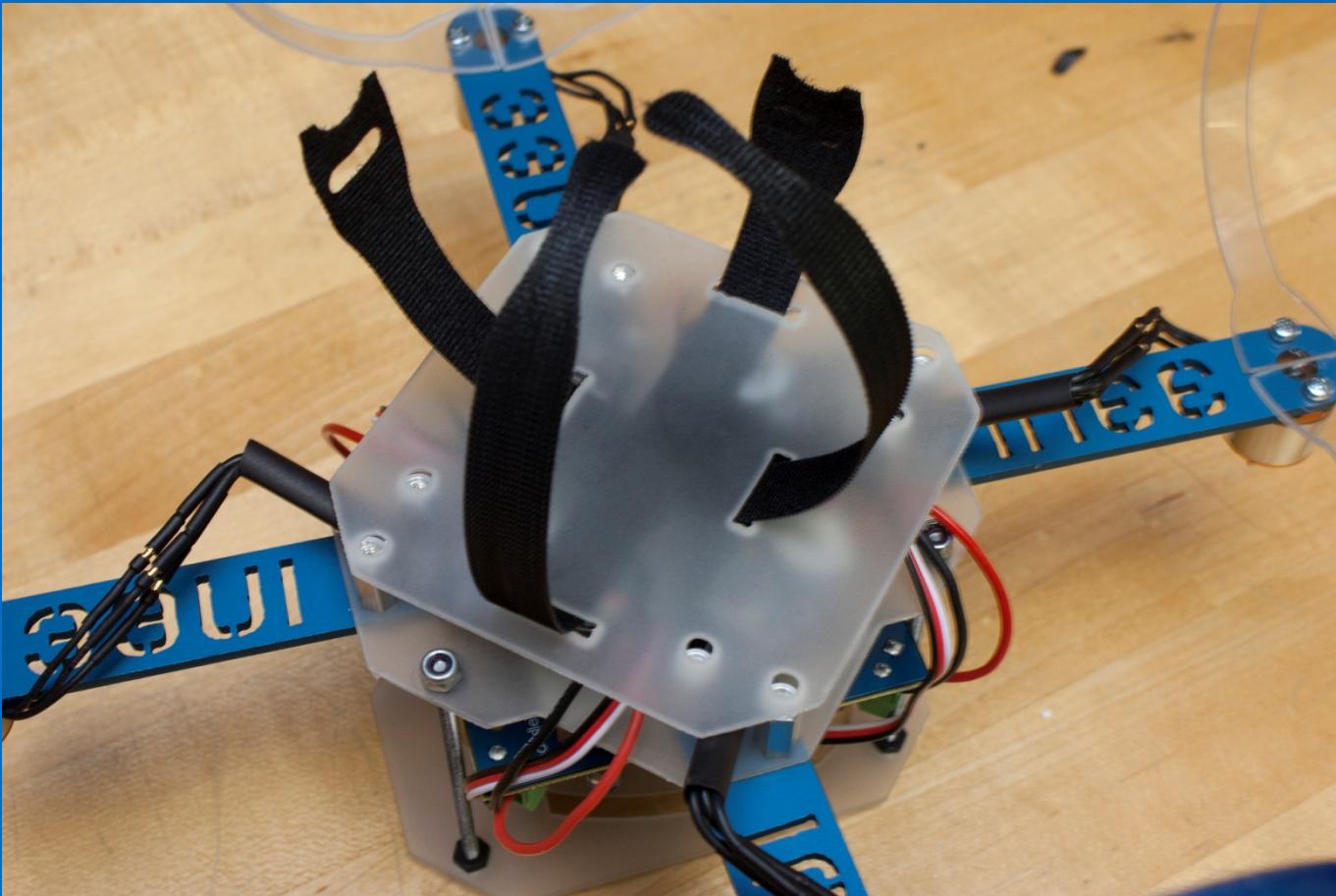
Attach Crash Protection Plate Mounting Studs to Frame Base Plate



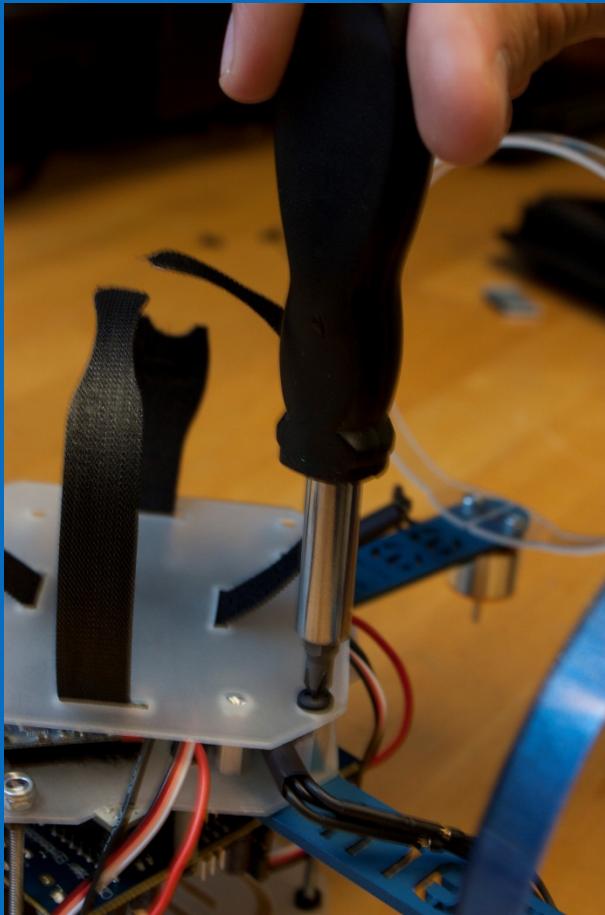
Locate Parts & Tools for Battery Pack & Lower Frame Plate



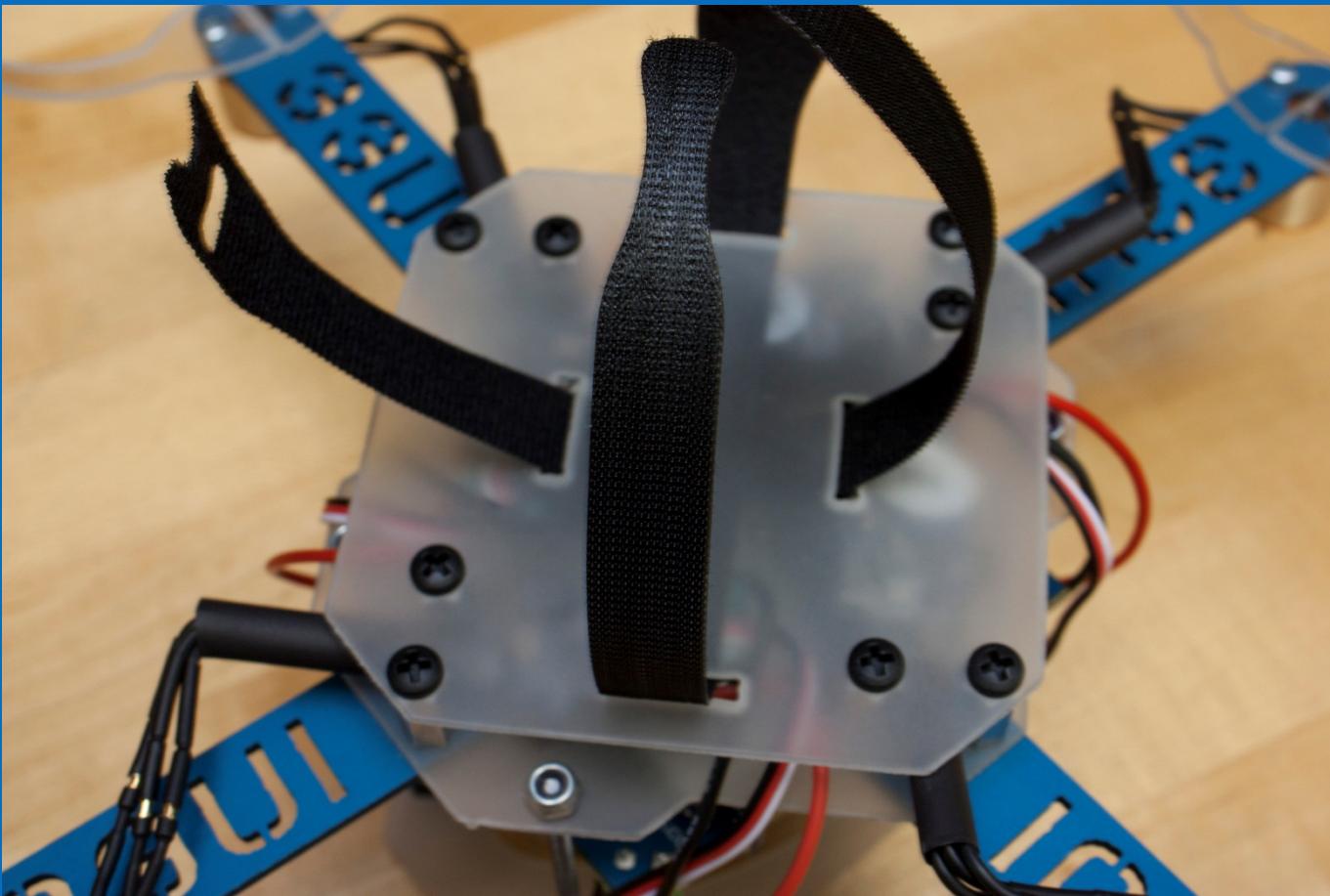
Slide Long Velcro Straps Through Slots on Lower Frame Plate, Align Plate with Holes



Attach Lower Frame Plate with Screws



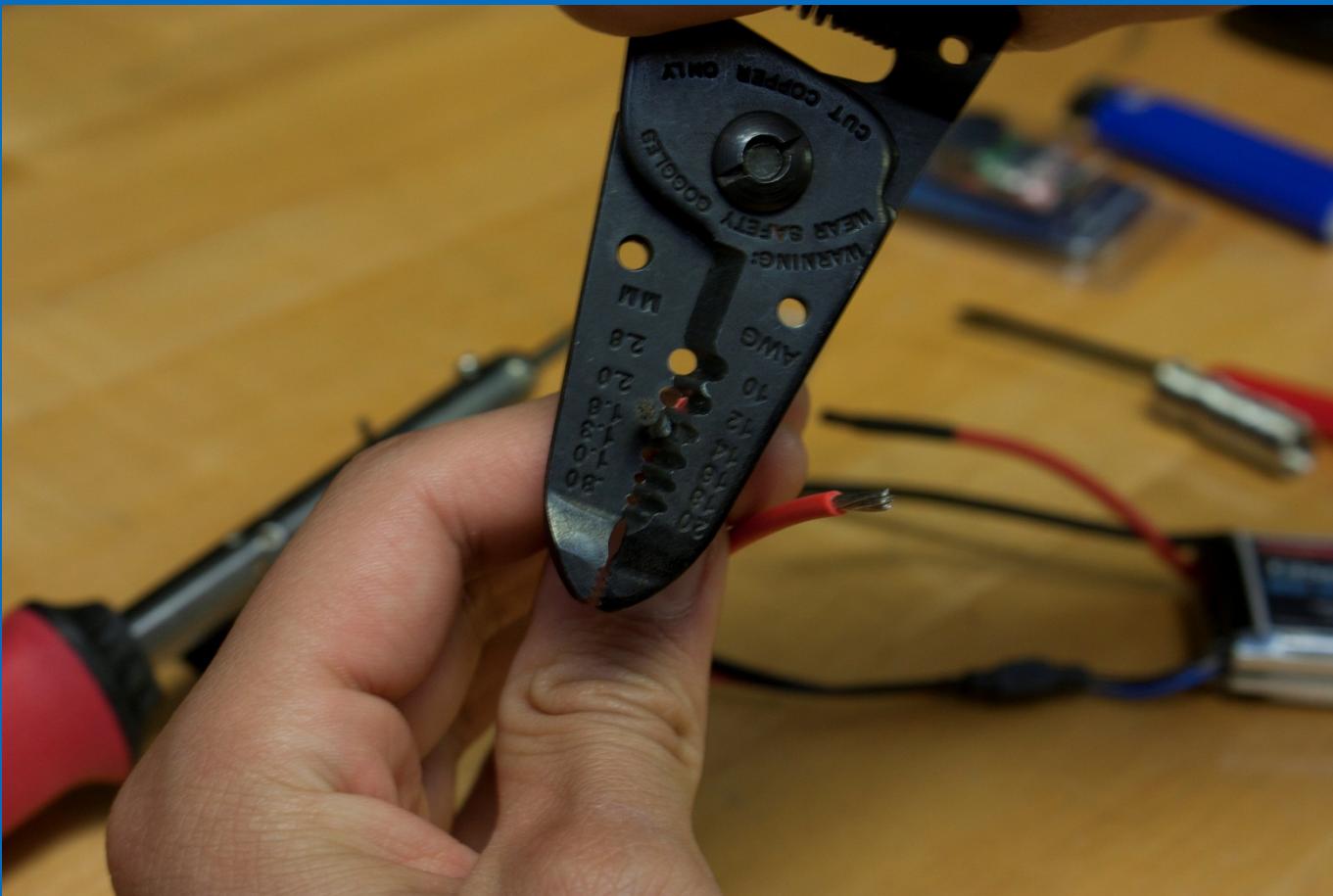
Lower Frame Plate Attached



Locate Battery Assembly Tools & Parts



Strip Insulation Off Of Red Battery Pack Wire (Leave Heat Shrink On Black Wire)



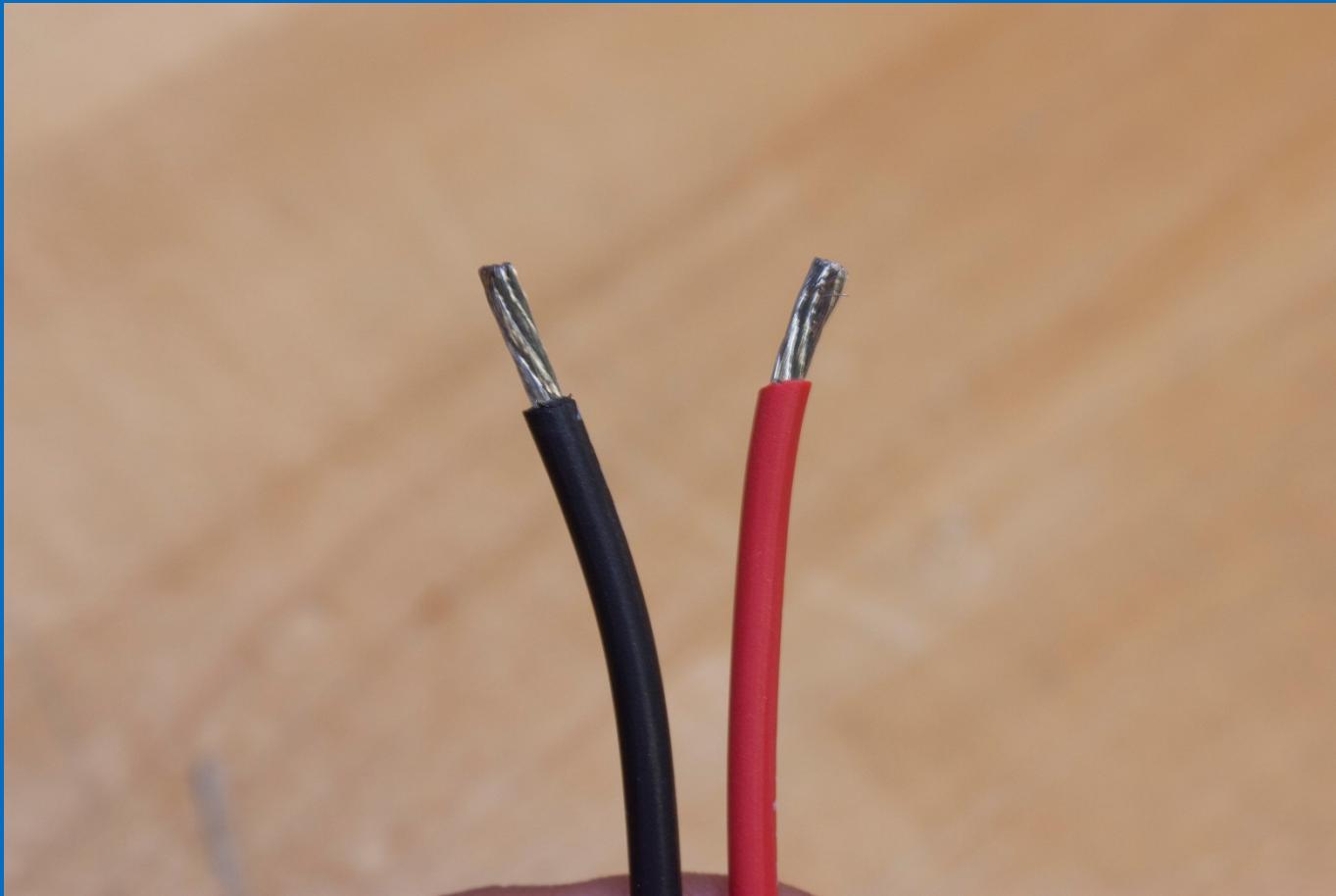
Strip Insulation Off Of Black Wire On Deans Connector



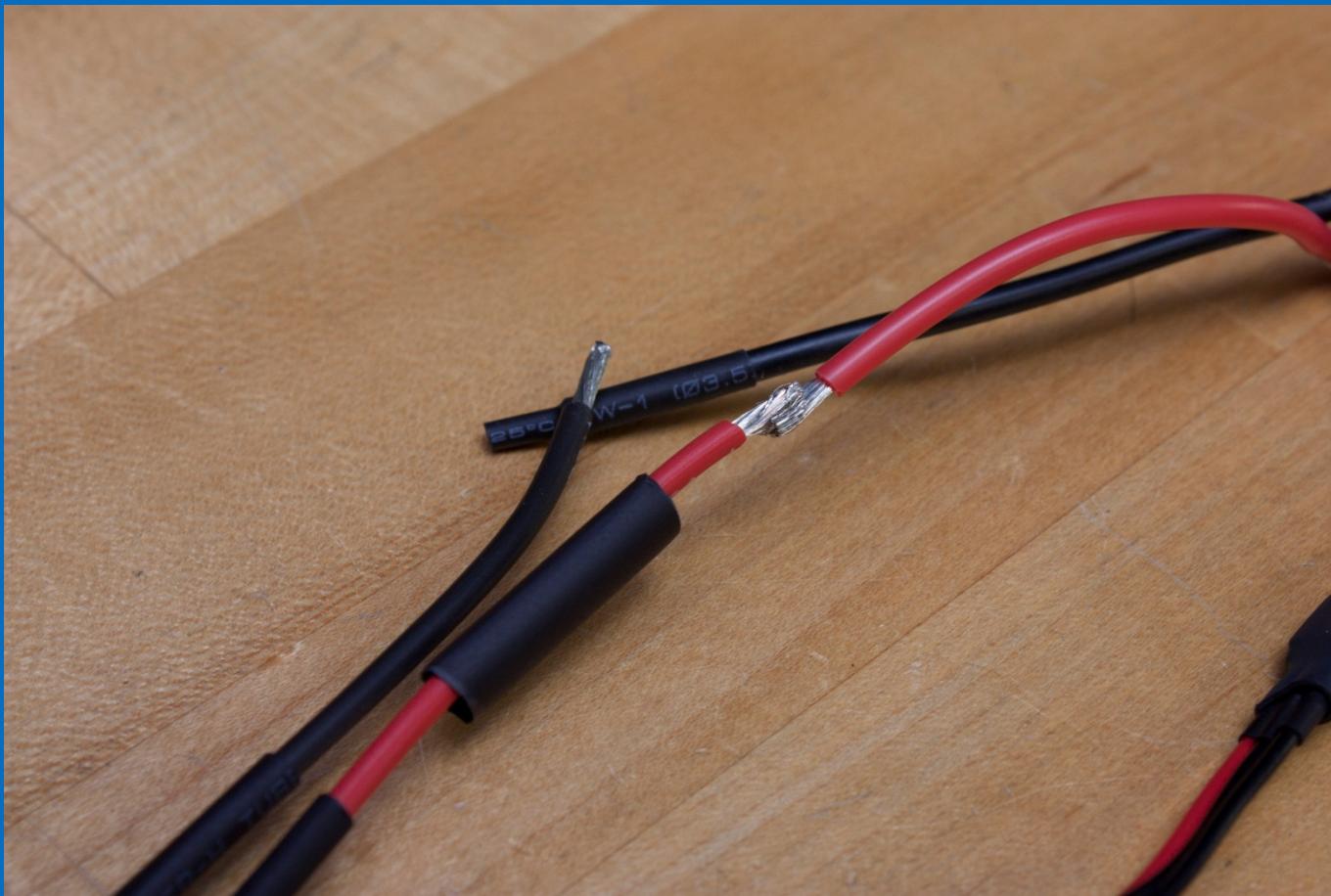
Strip Insulation Off Of Both Deans Connector Wires (Red and Black)



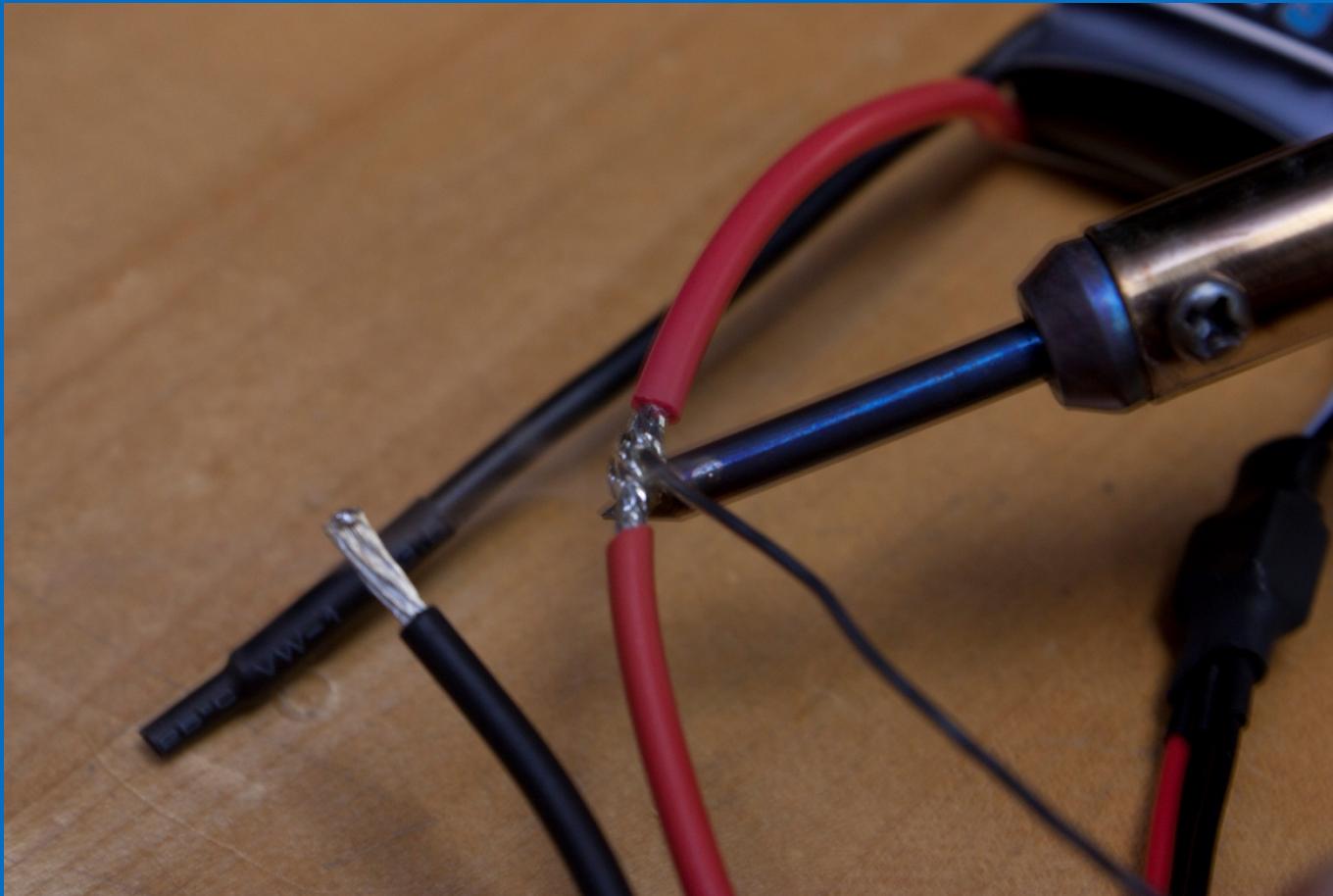
Clean Insulation Stripped



Slide Heat Shrink Tubing up one wire and Mate both Red Wires



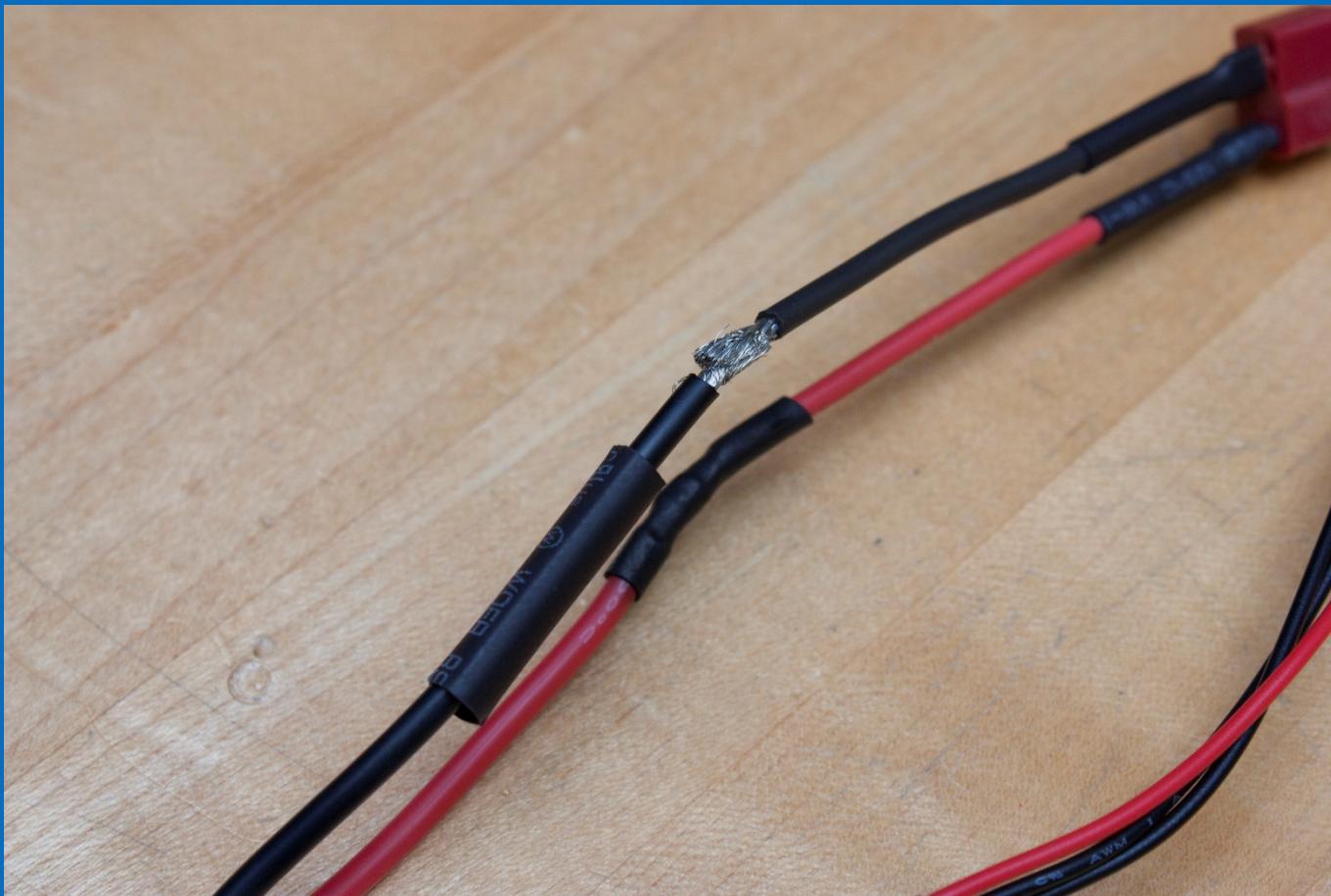
Apply Heat with Soldering Iron, when hot apply Rosin Core Solder



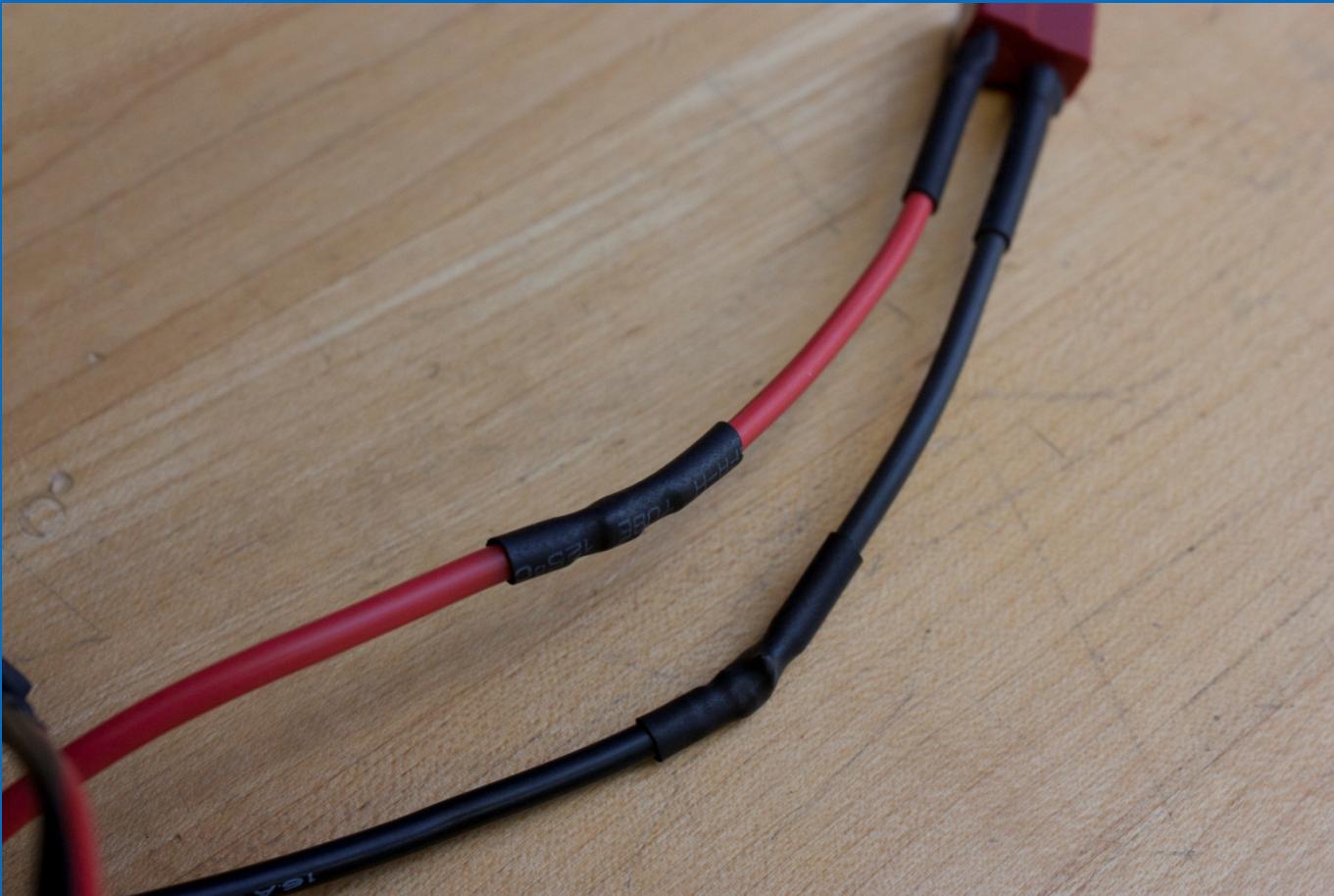
Slide Heat Shrink Tubing Over Solder Joint and Shrink with Lighter



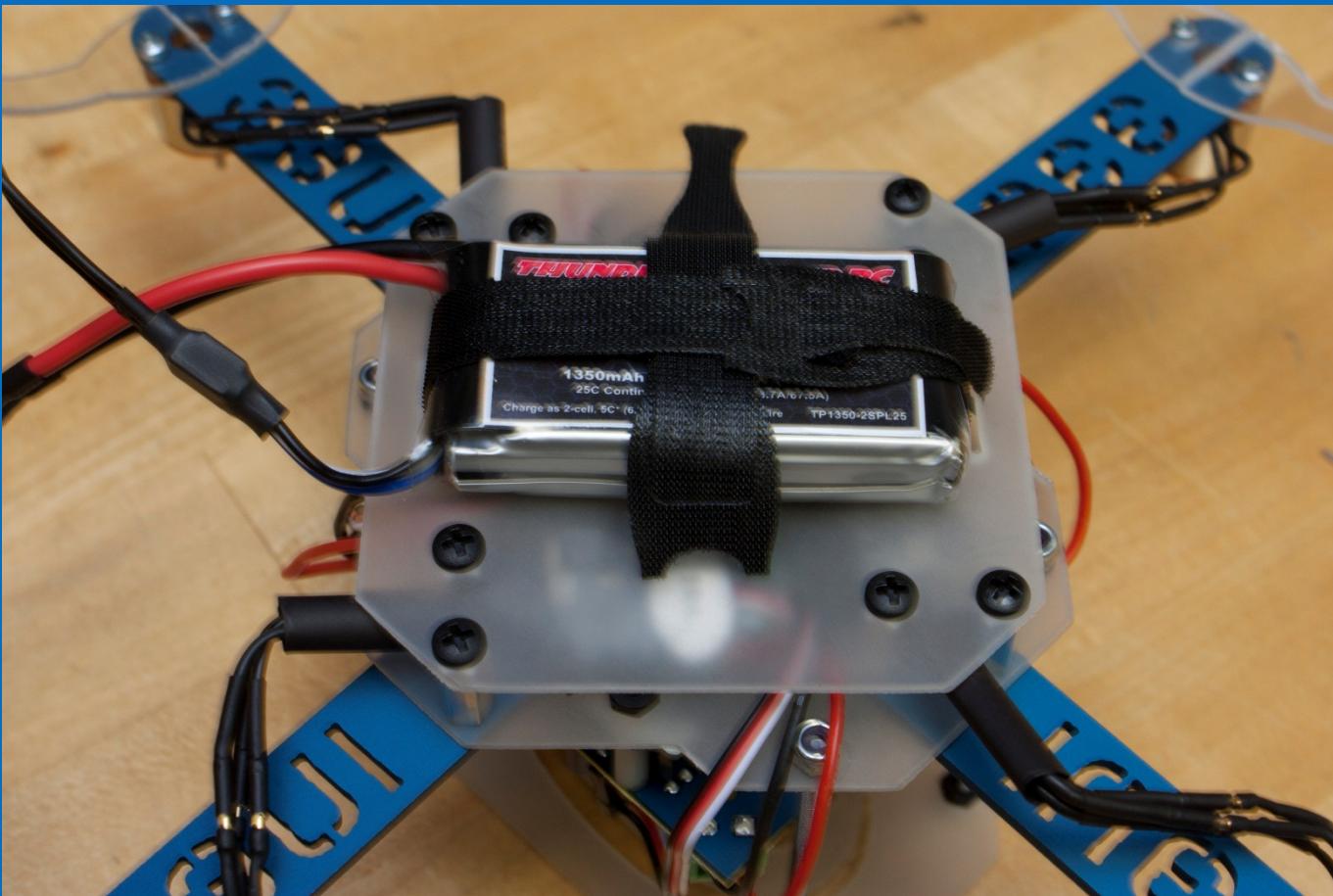
Strip Black Battery Pack Wire, and repeat the process for Black wires



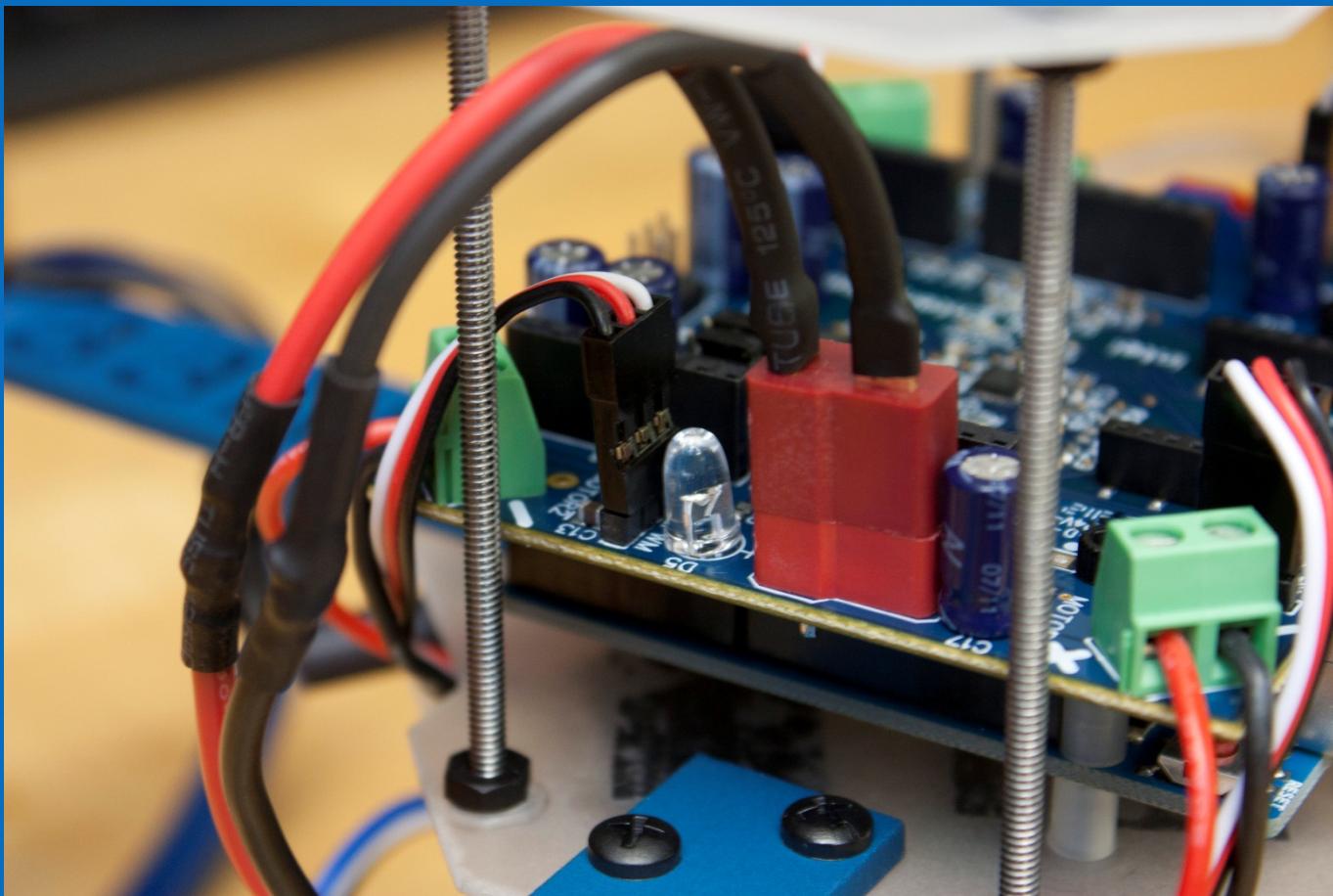
Completed Solder Job



Attach Battery Pack With Frame Bottom Plate Velcro Tape



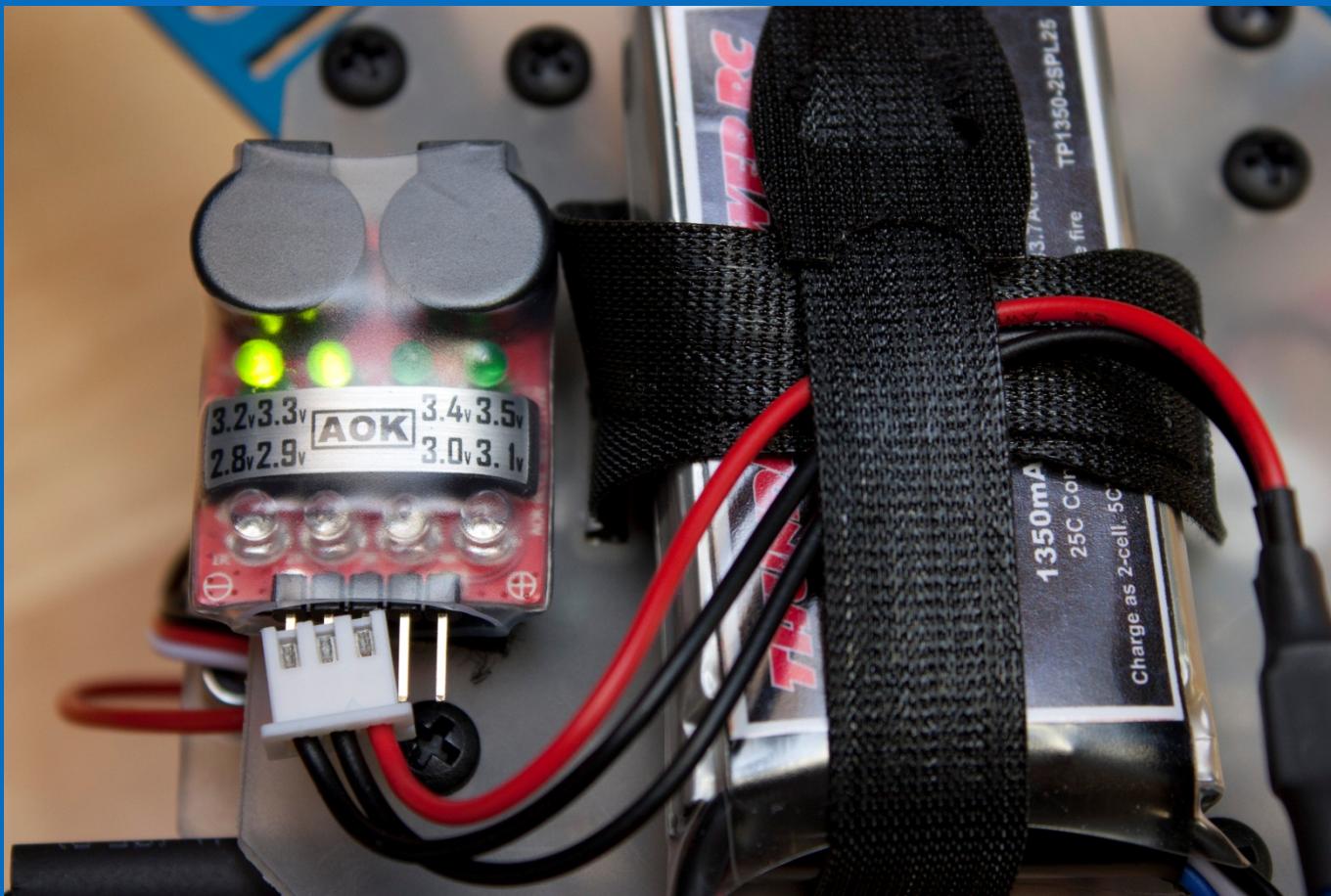
Attach Battery Pack to Shield Board via the Deans Connector



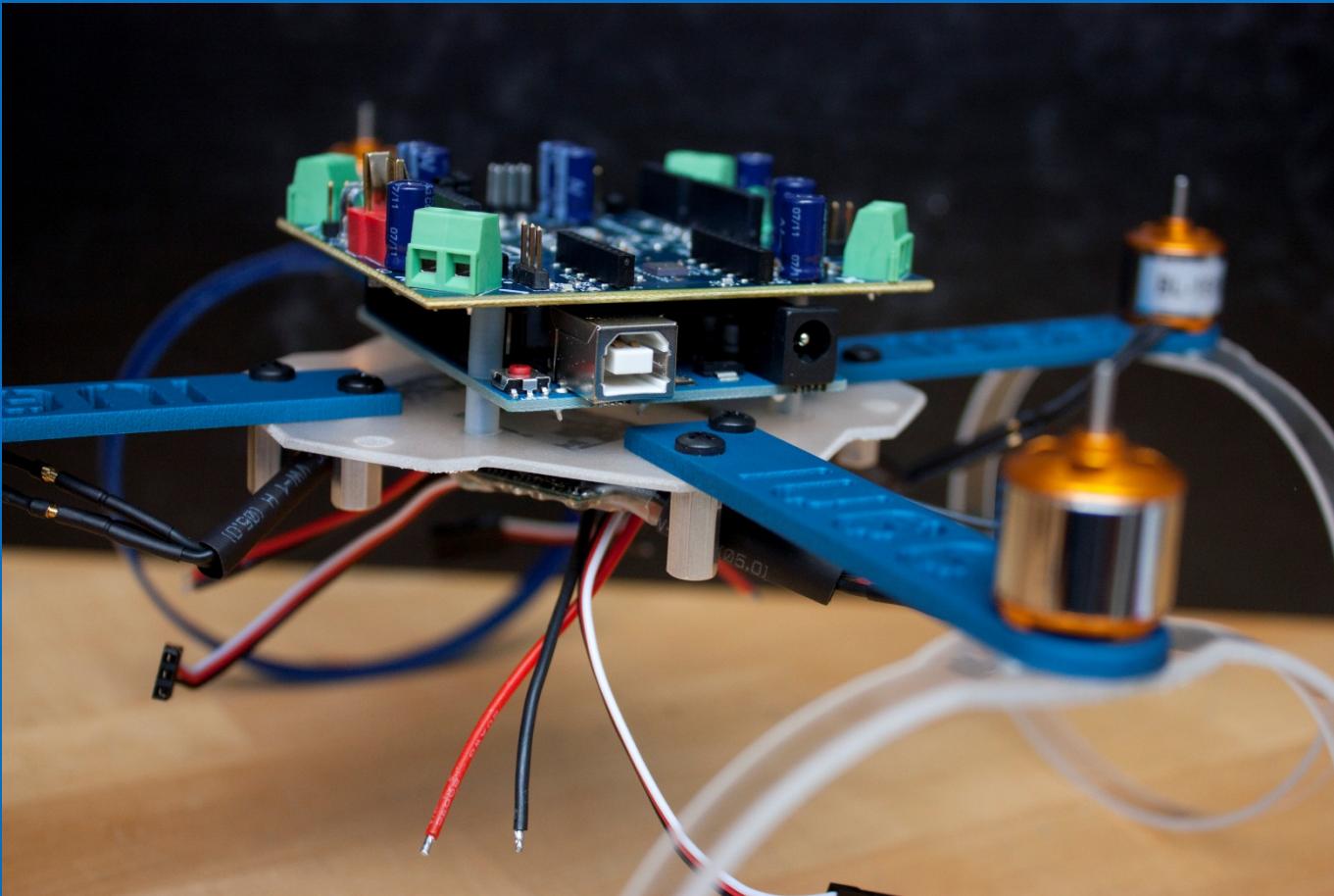
Locate Battery Monitor and Attach Velcro Tape



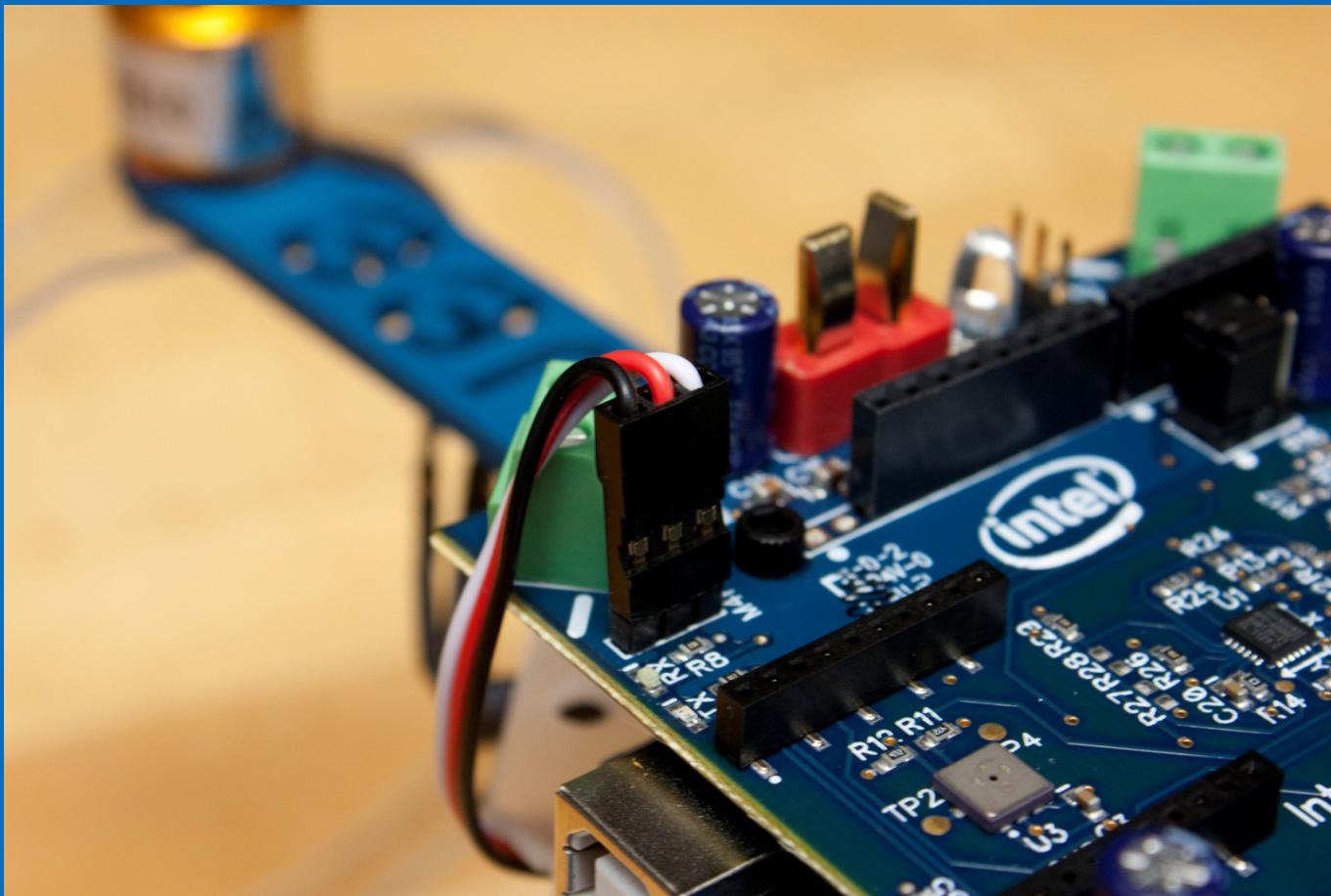
Attach Battery Monitor to Frame Bottom Plate and Insert Battery Pack Monitor Cable



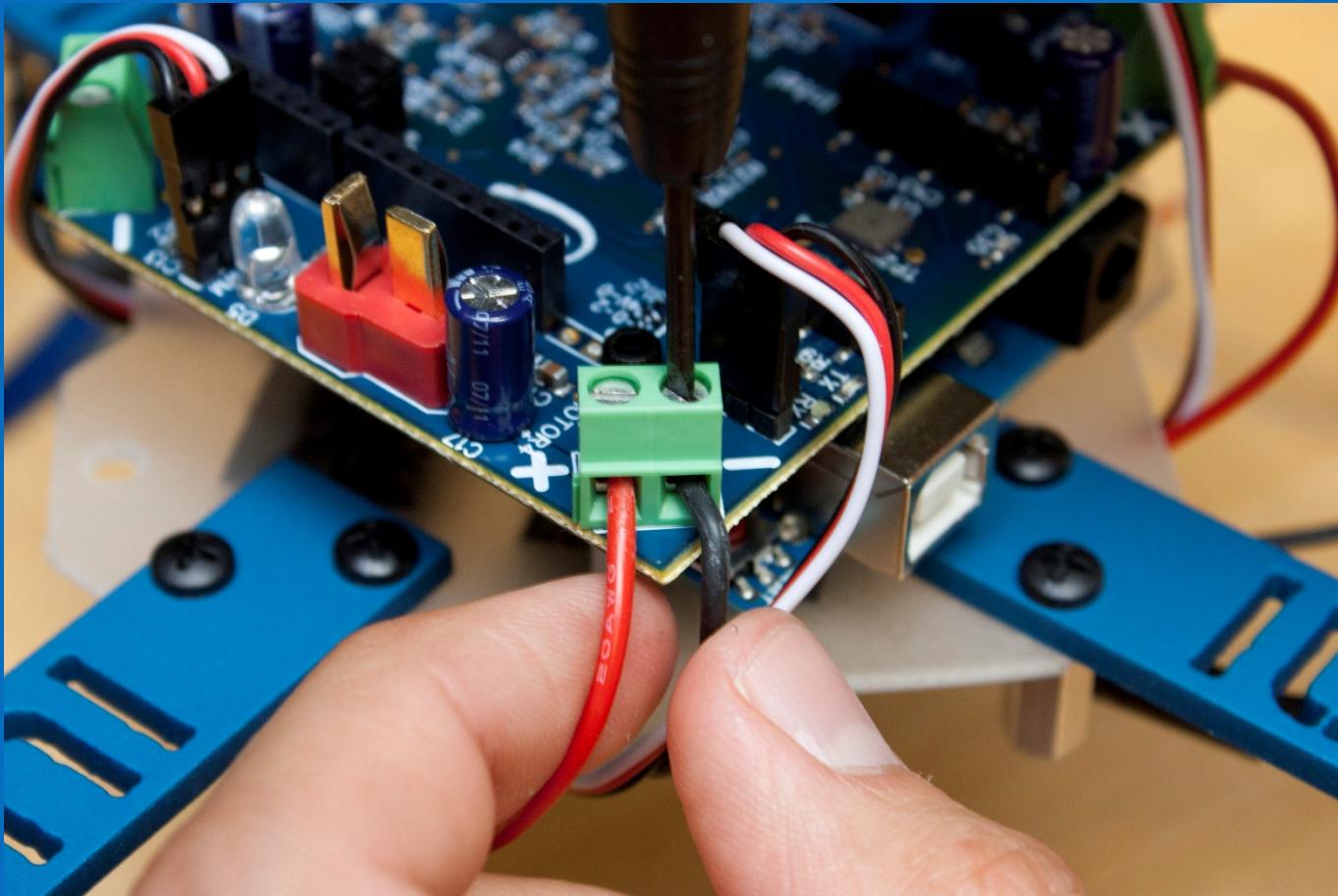
Locate ESC Power and Control Wires



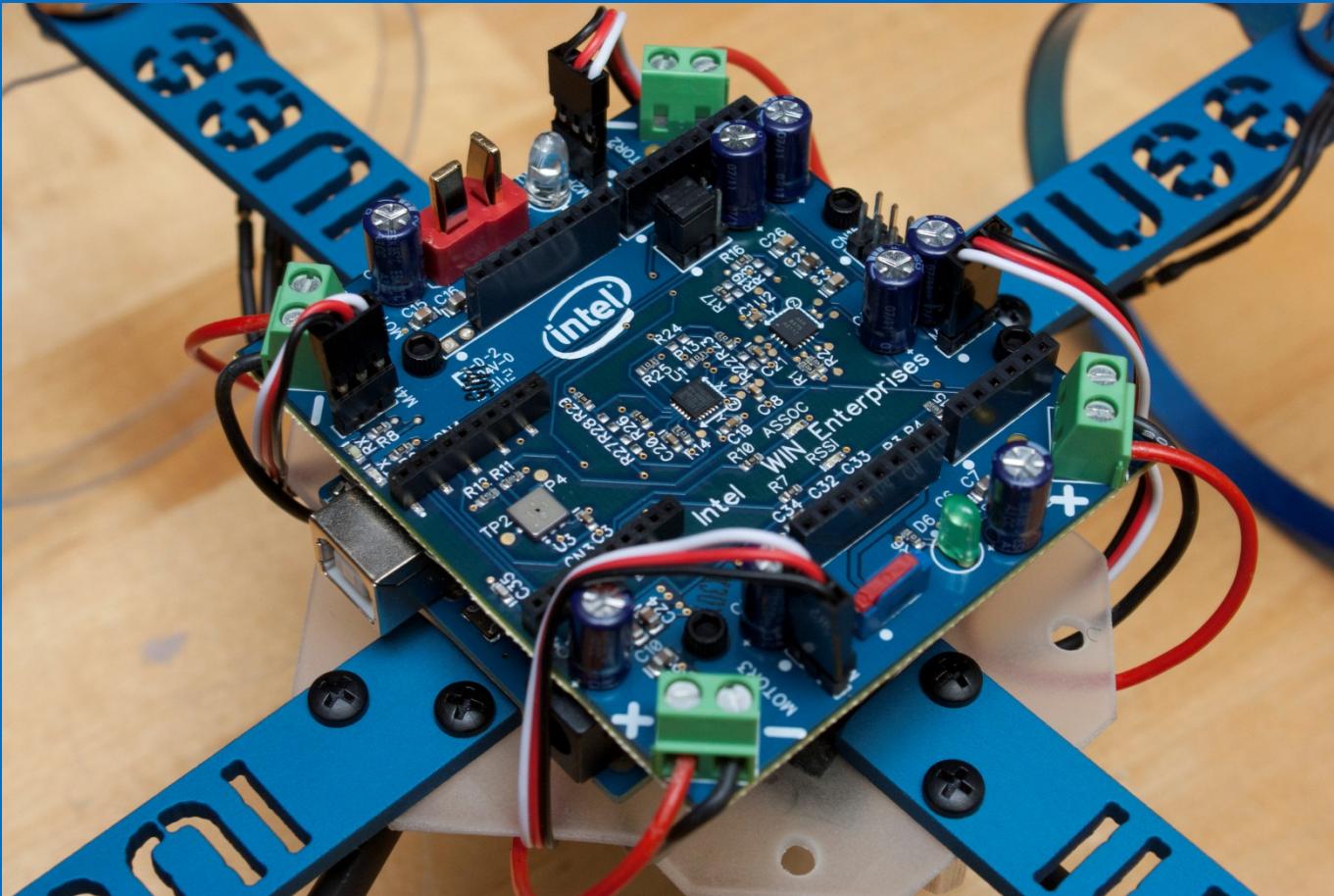
Attach ESC Control Cable to Shield (Black Wire Towards Edge of Shield Board)



Attach ESC Power (Red) & Ground (Black) Wires on Shield "+" and "-" Terminals



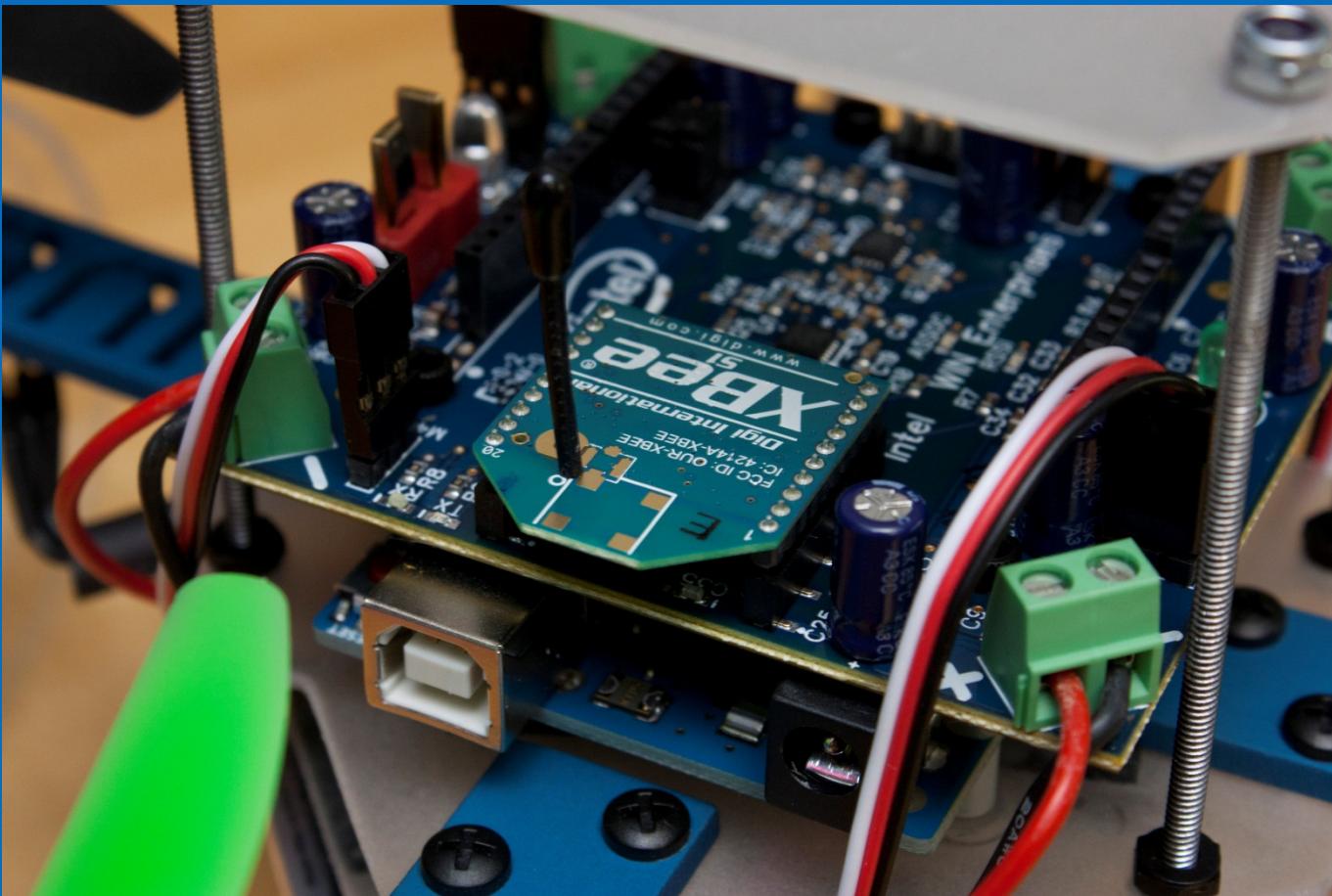
Repeat Process for all Four Motors



Locate the ZBee Module



Attach ZBee Module to Shield



Questions?





Backup