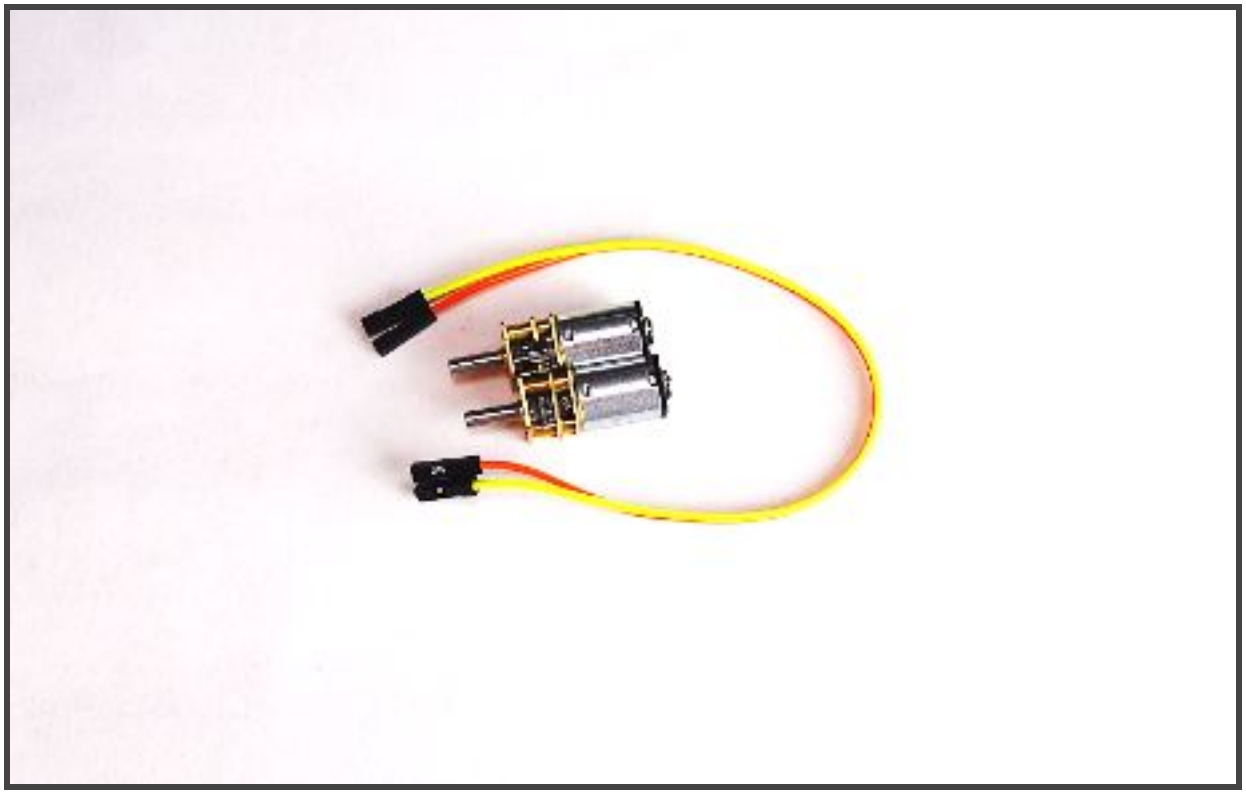
ProtoBot Motor Soldering Guide



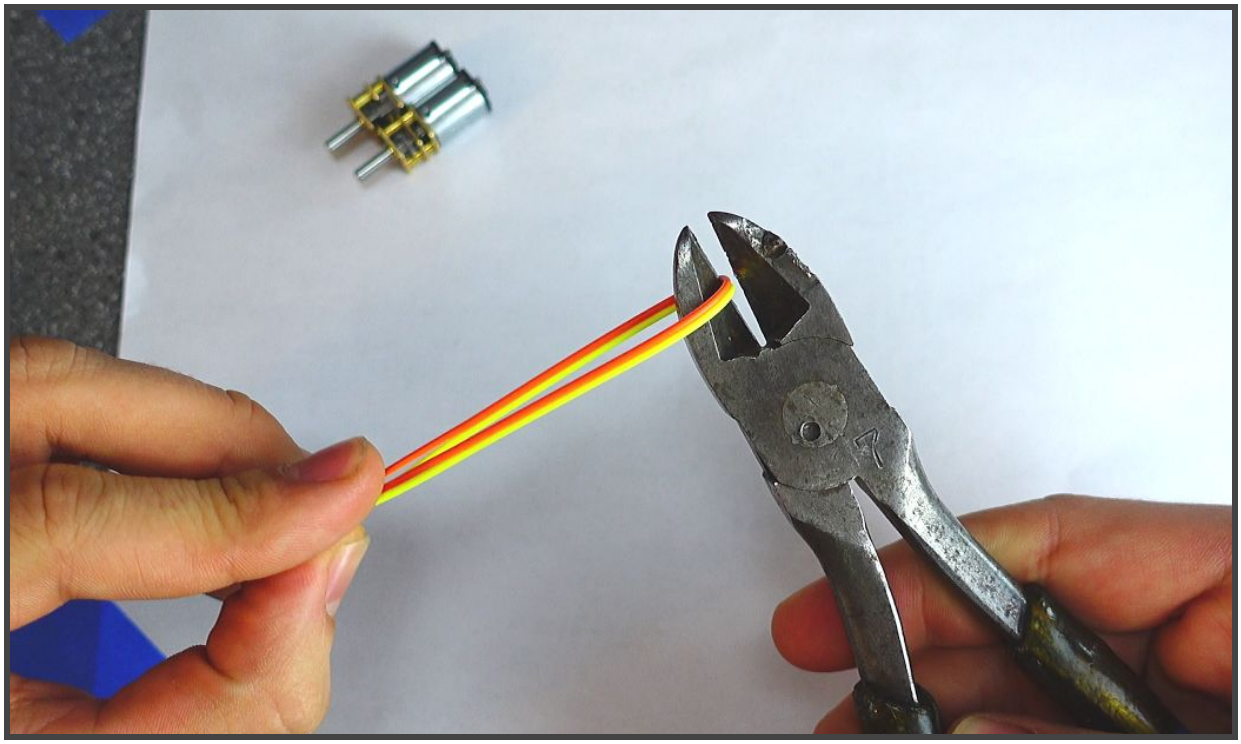
You will need:

Parts:

- 2 x N20 Gear motors
- 1 set of two DuPont Female-Female jumper wires

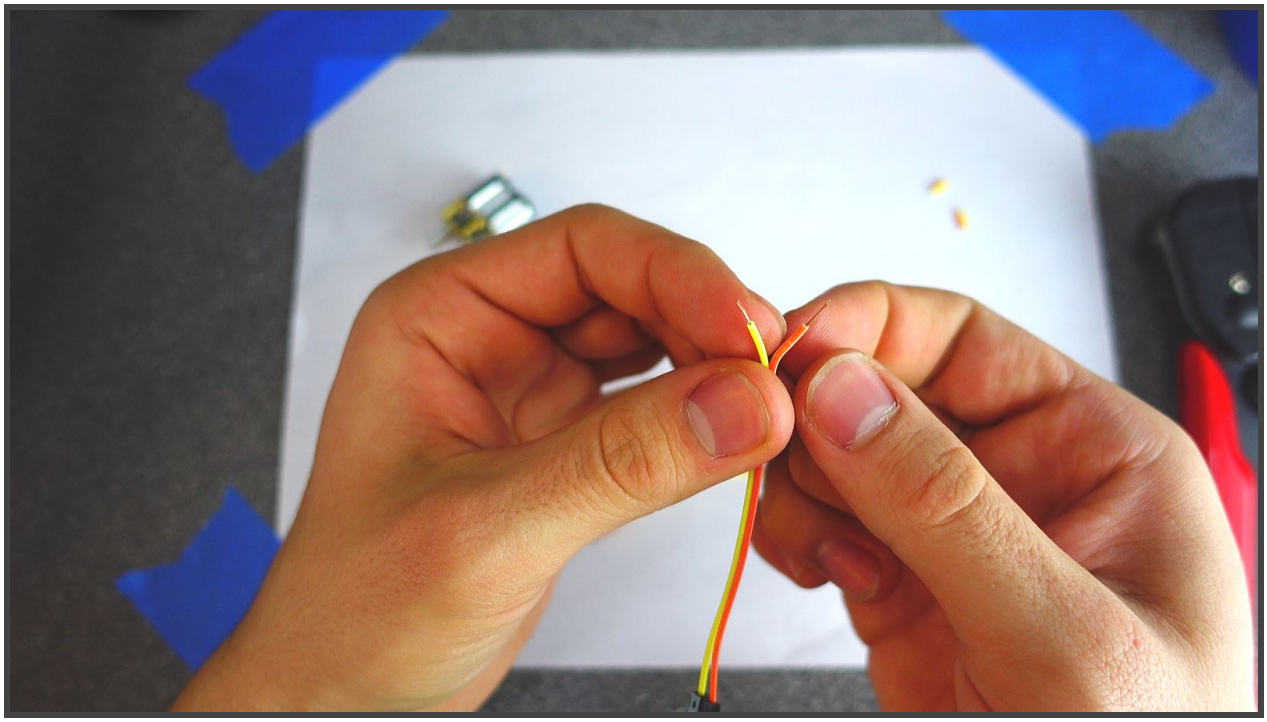
Tools:

- Wire cutters/Strippers
- Soldering Iron with Fine tip
- Helping Hands, or something to hold the motors in place. (I used foam and tape)
- Hot Glue gun with Glue (High-Temp preferable)

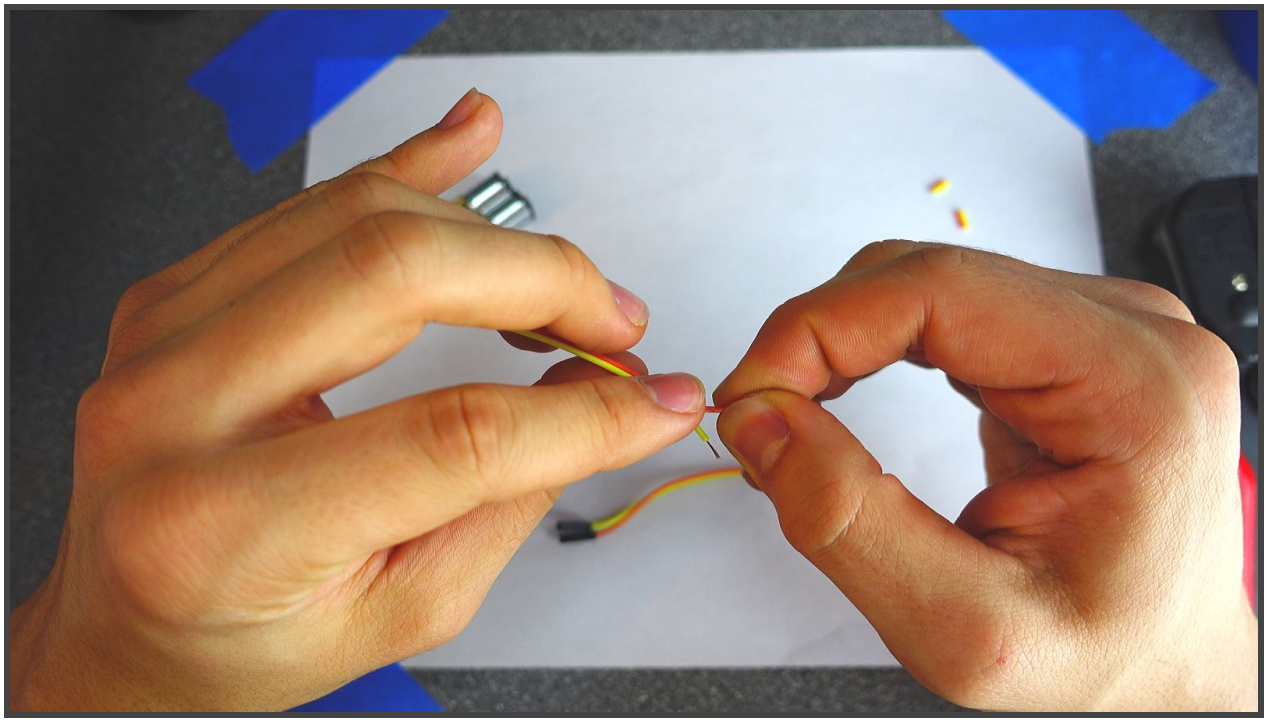


- Take your pair of wires, and cut them in half down the middle

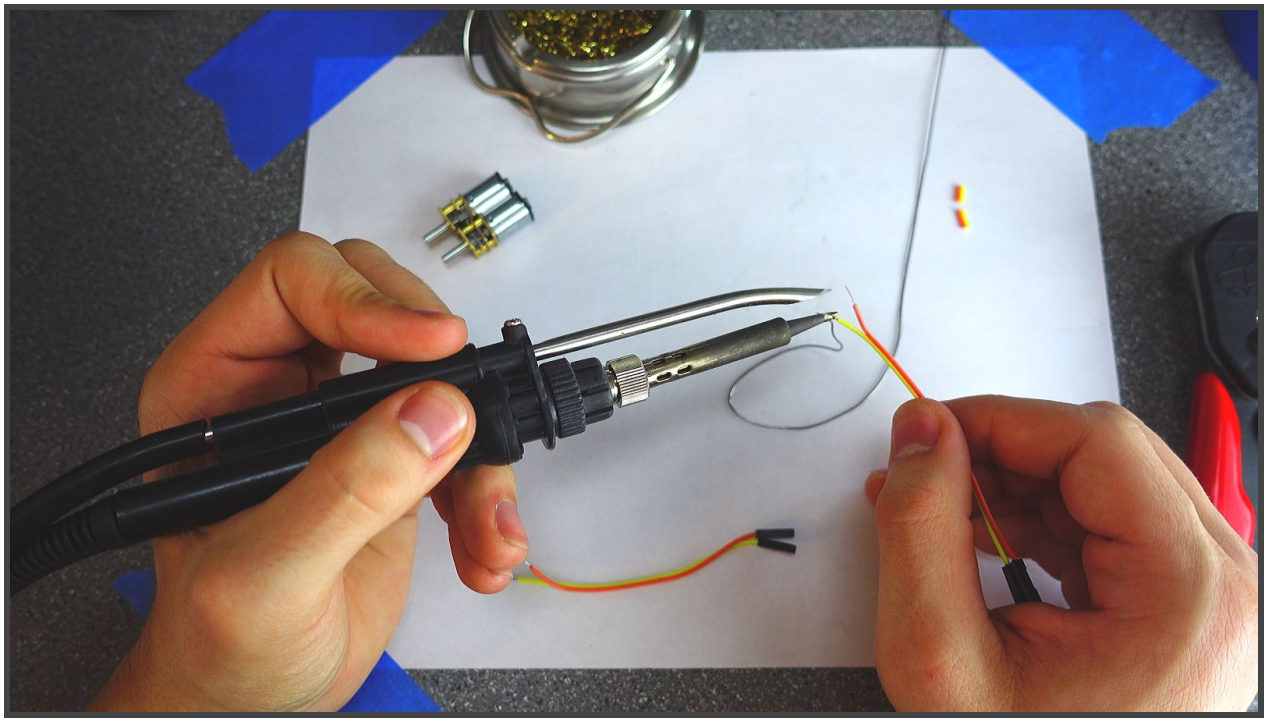
- Use your wire cutters to strip about 5MM or ¼“ off the ends of each set



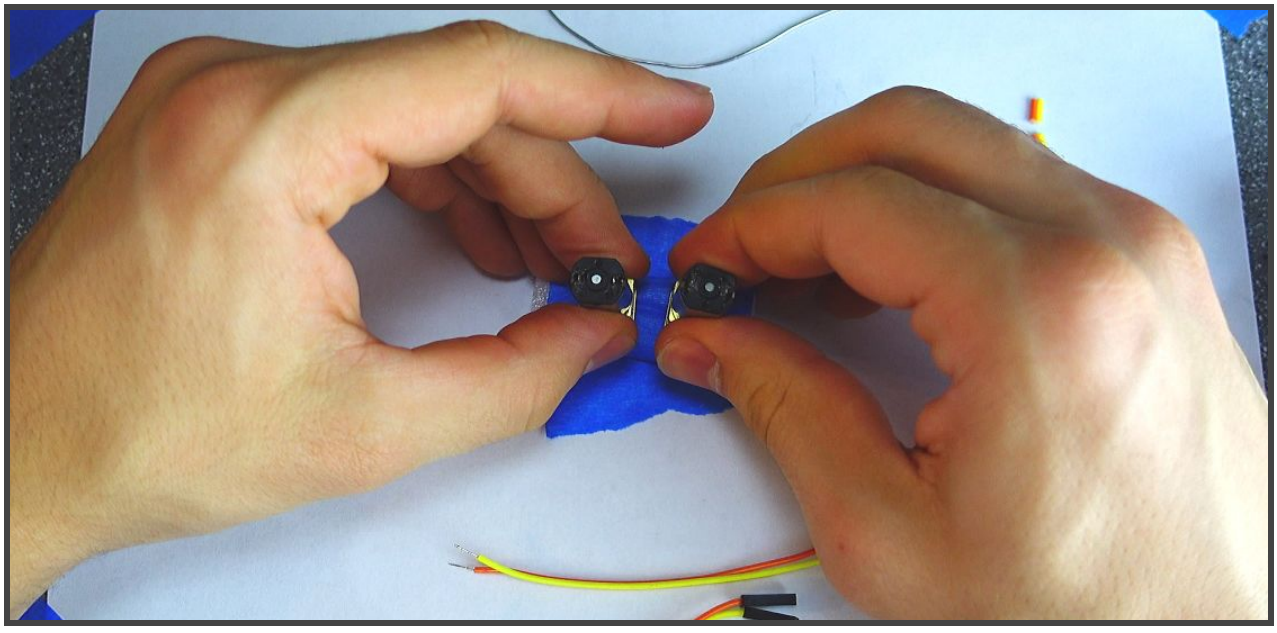
- Split the ends apart



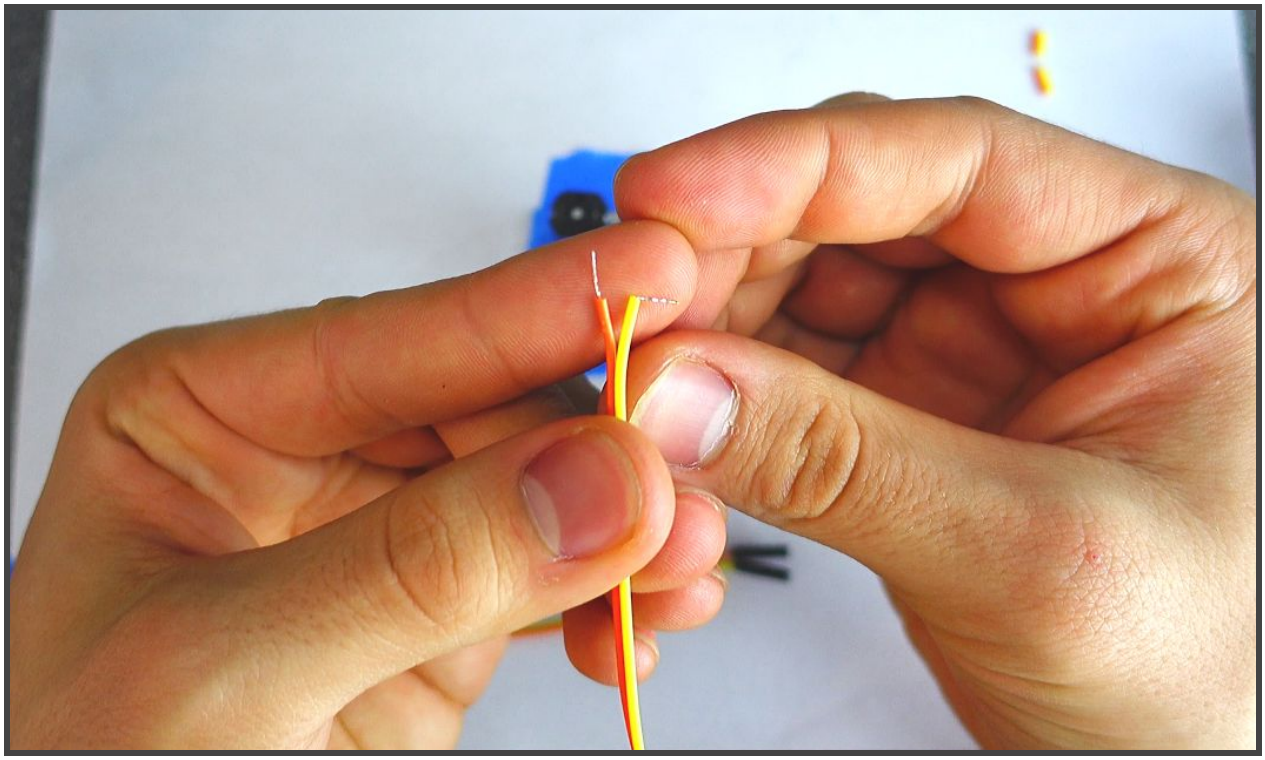
- Twist the strands of each wire end together, so that they stay tidy



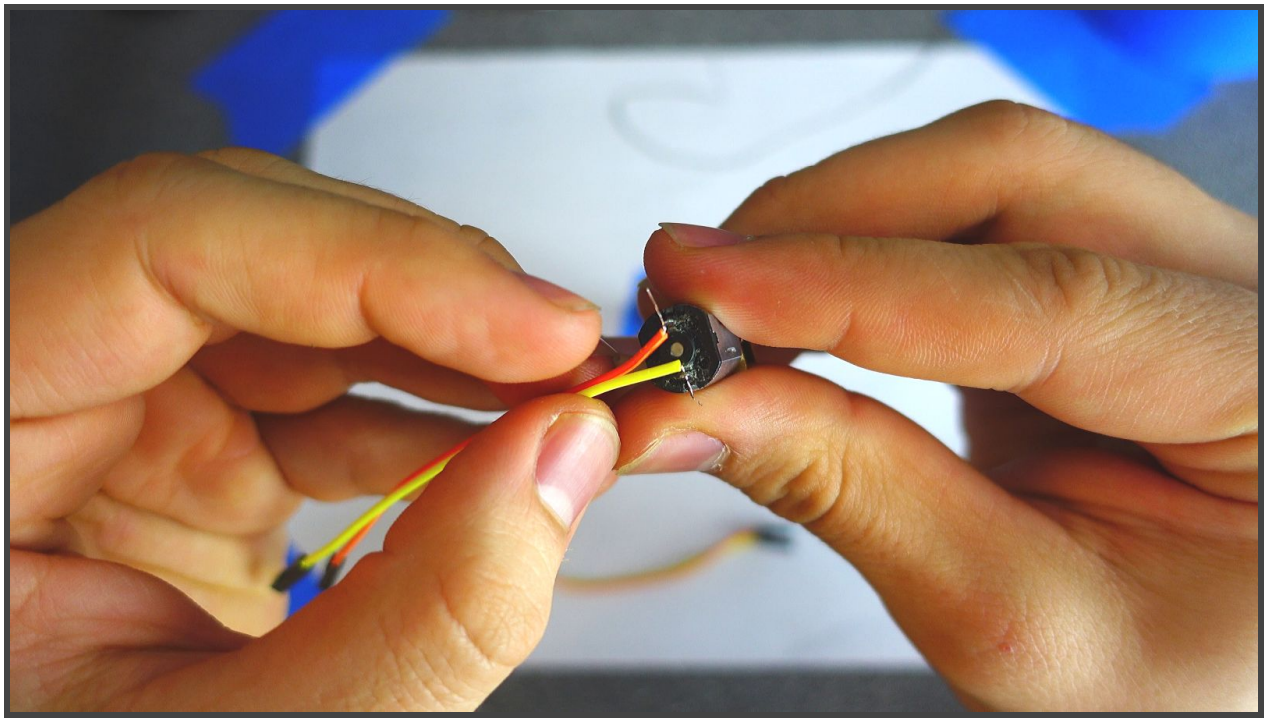
- Tin each wire end, by holding them on top of the solder, then applying your iron’s tip



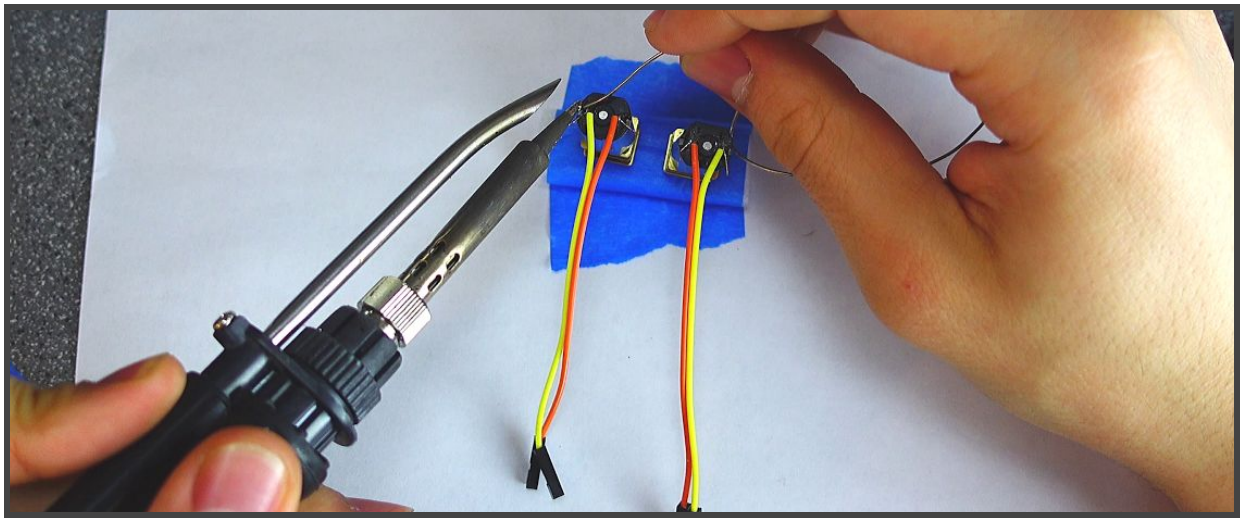
- Secure the motors somehow. I used a piece of foam with tape to hold it in place.



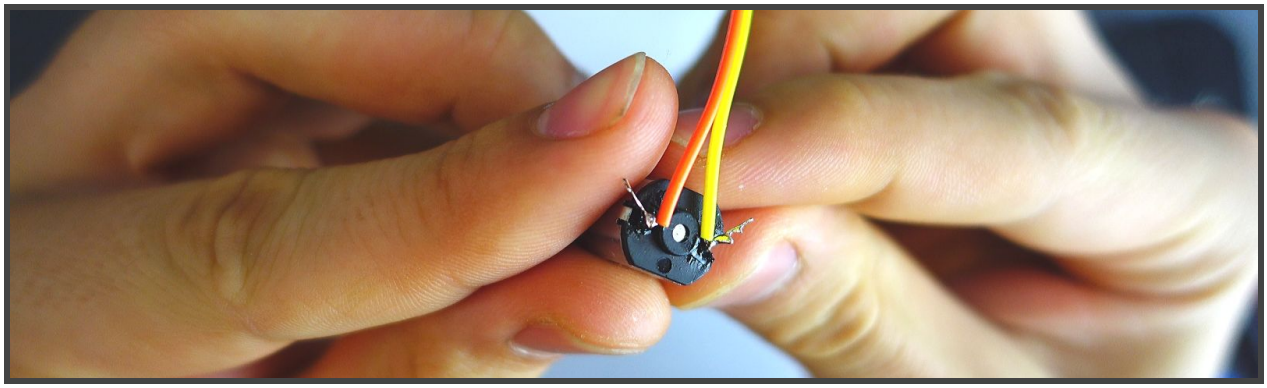
- Bend the wire ends at a 90 degree angle, so that they’re 180 degrees apart



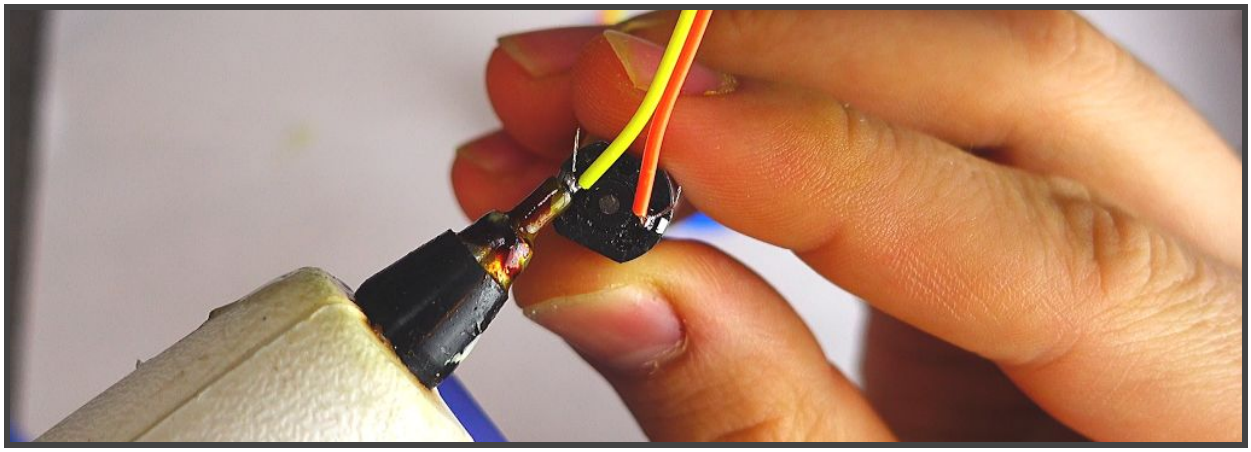
- Insert the wire ends into the holes in the metal connection tabs on the motors



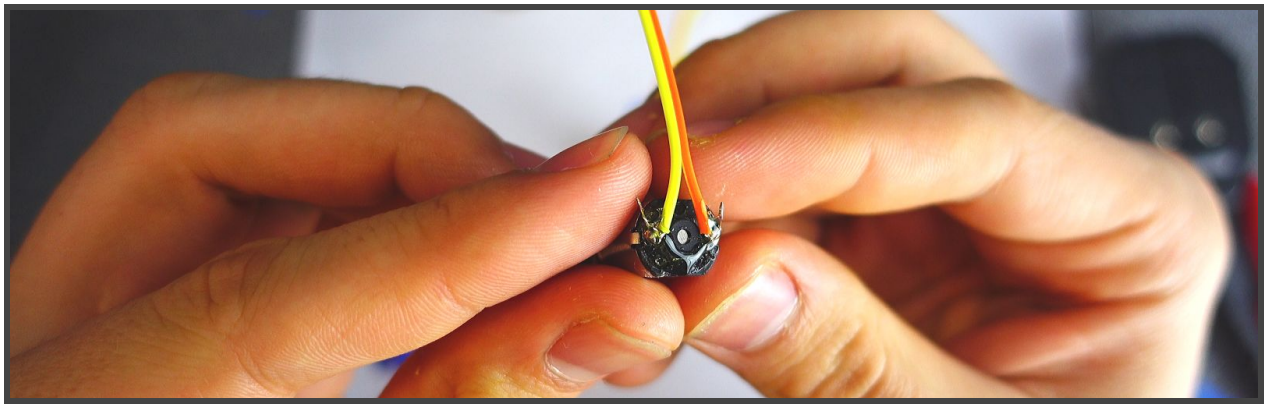
- Solder the wires to the motors



- When you’re done, each motor should look like this



- Use your hot glue gun to put a generous dab of hot glue on each joint



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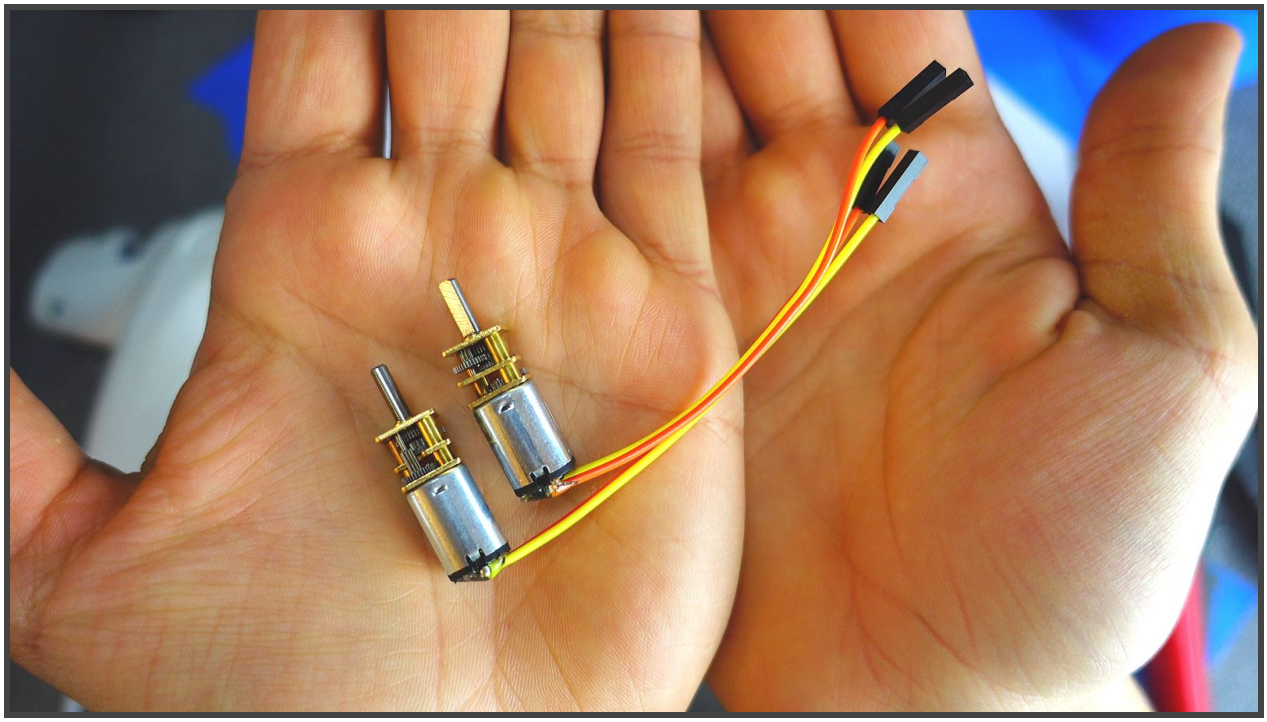

Your motors are now ready to be used on a Protobot!