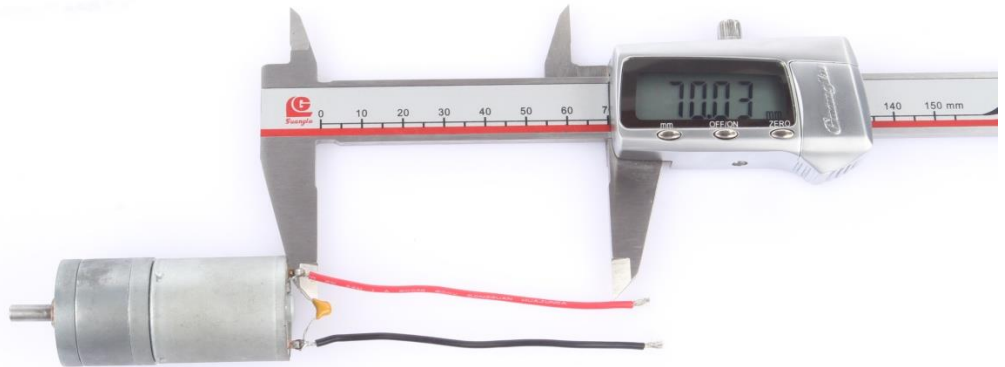


Soldering:

1. The wires are about 70mm long. Wires and capacitor can be connected to any electrode.

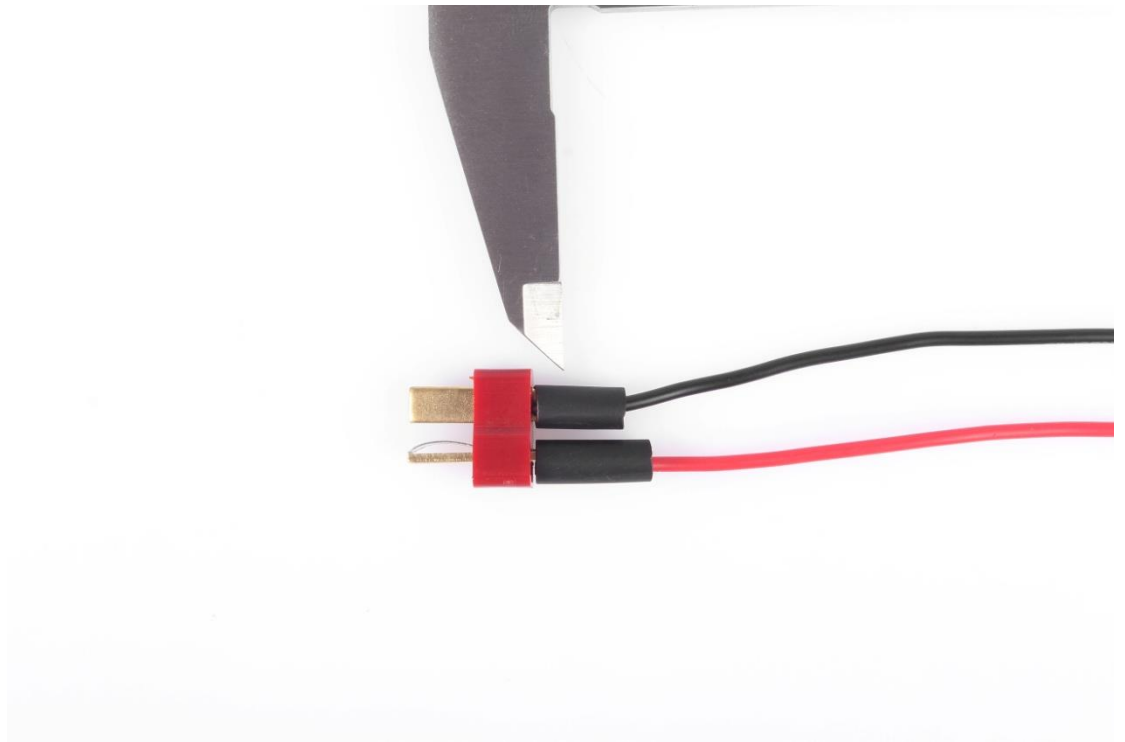


2. The T-plug **needs to be** soldered as shown in the diagram below. See the second diagram for more details.

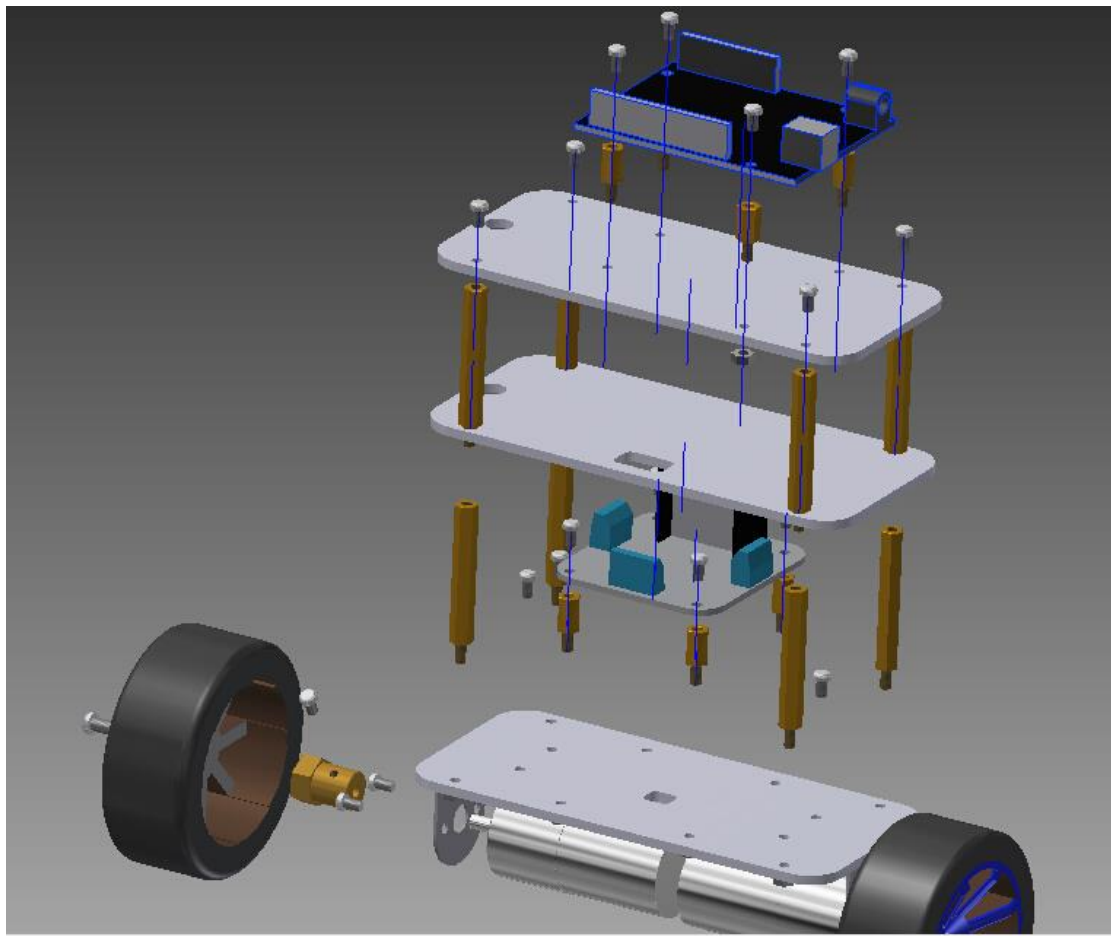
Slide the heat shrink tubing over the top of the wires after soldering and apply heat.

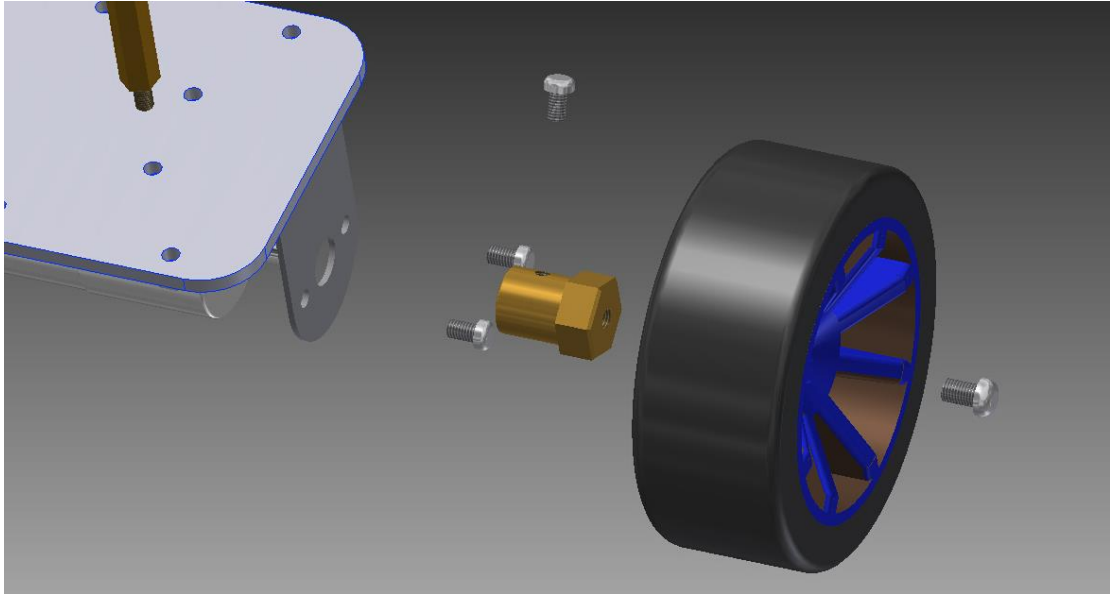
The red wire **needs to be** connected to the VCC which is on the L298N and the black wire **needs to be** connected to the GND.





Expanded diagram:





Wiring:

Robot:

5V -> 5V
GND -> GND
IN1 -> D3
IN2 -> D4
IN3 -> D5
IN4 -> D6
ENA -> D9
ENB -> D10
MOTOR1 -> OUT1, OUT2
MOTOR2 -> OUT3, OUT4
Potentiometer1 -> A0
Potentiometer2 -> A1
Potentiometer3 -> A2

Controller with LCD:

SDA -> A4
SCL -> A5
Joystick_1 VRx -> A0
Joystick_1 VRy -> A1
Joystick_1 SW -> D2
Joystick_2 VRx -> A2
Joystick_2 VRy -> A3
Joystick_2 SW -> D3

Caution:

1. Robot:
11.1V Li-Po battery is the best power source for the robot, but other types of batteries can be used. Ensure that the voltage of the battery is between 10V to 13V;
2. Remote control:
Use a 9V battery for the remote controller;
3. Wiring:
Because not everyone solders the wires in the same way, if the wheels turn in the wrong direction swap the D3 and the D4 or the D5 and the D6;
After adjusting the robot so that it can stand up, try to control it with the remote controller. If it can go forward and go back normally but cannot turn, please swap D9 and D10.